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THE BUILDER

A Journal for the Architect & Constructor

APRIL 5, 1929 — No. 4496

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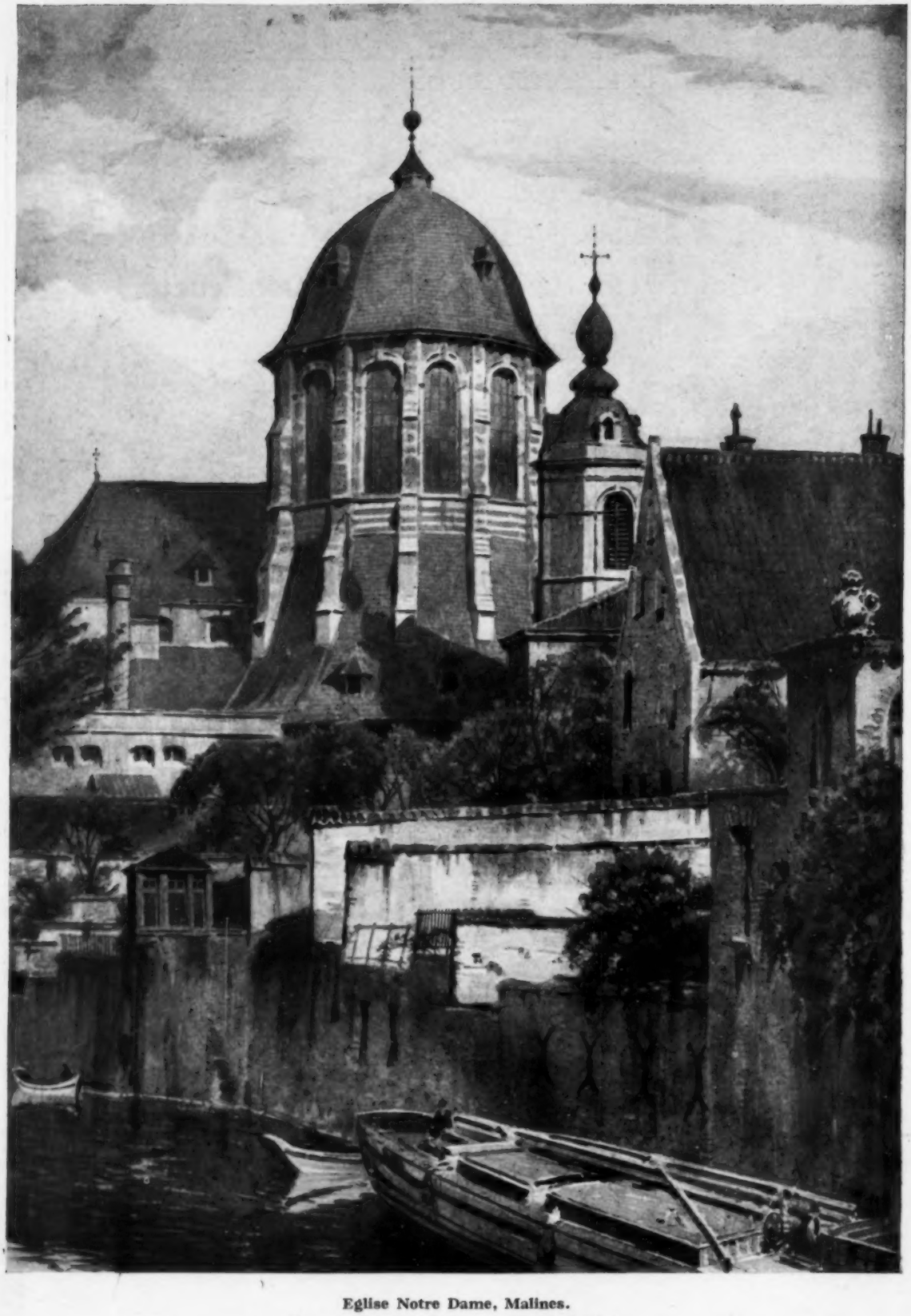


Eglise Notre Dame, Malines.

From a Drawing by Mr. A. C. Fare, A.R.I.B.A.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXXVI. No. 4496. APRIL 5, 1929

MECHANICS AND BUILDING

WE have lately been reading an article devoted to some thoughts following upon the design of Major Segrave's racing car, "Golden Arrow." With a sufficient grain of truth to be plausible, a kinship was traced between the process which produced that wonder-working machine, and that which leads up to the completion of a complicated modern building. The writer drew attention to the stark reality of modernist design of a certain school of thought, and to the artist's obvious intention to carry the eye with a quick sweep from pavement to sky. We might admire a mental vision that has picked out the harmonies from the diverse, were we not convinced that there is a mischievous fallacy underlying this line of thought, and one that is doing more than enough harm to the development of fine architecture in our times.

The sense of wonder which is induced by a great machine in action is well understood. Most of us have stood in a great workshop and admired the inevitable rhythm of the parts; experienced the consciousness of great power under perfect control; or thrilled at the thought of man made powerful by his own ingenuity. In these things there is a certain cold beauty which efficiency brings in its train; and because there is need for some expression of efficiency in all works of art, careless thought may leave us satisfied when efficiency is satisfied. By this process the house becomes a weather-proof box and the building of many parts a grouping of bare cubes. There are plenty of people ready to fall down and worship this sort of thing as the sublime, and too few who feel the utter insufficiency of it ready to expose the counterfeit.

The purely efficient mode of living is a poor and insufficient sort of life when all is said and done. We should think twice before we changed those trivial moments when we draw shivering up to the warmth of a cheerful fire, or gratefully throw wide the casement of a stuffy room, for the never failing efficiency of a thermostat. There is no health chart we would trust before the instincts of a healthy appetite; no rule of physical exercise so fine as the call of the open-air or the instinctive call of spring. There is something beyond us in all these things, something that is a check to that conceit that makes us too proud of our knowledge, and too suspicious of our nature. It is a "something" we are prone to forget until efficiency leads us automatically through a maze of routine, governed by gauges and gearing, up to the point when we ask: *Cui Bono?*

What are we to do then? Are we to throw overboard all respect for mechanical efficiency, and get back to nature, as they say, somewhat pitifully? That would indeed be the other extreme of foolishness. Where men live on a 'and that feeds but a tenth of their numbers, it is man's ingenuity that makes the impossible possible; and to express his life under such conditions only in terms of the natural would be as false as to live by spade and net would be impossible. All we have to do is to seek that just sense of proportion that relates the one with the other in a near approach to the truth. This is what the architect must seek in his works, and what the wise man seeks in his life. The Gothic revivalist, and the pre-Raphaelite, were over-conscious of one side of life. The modernist, as he is called, seems too much wedded to the other. Somewhere between is to be found that true expression of twentieth-century life that will leave architectural masterpieces for another generation to reverence.

Mr. Hope Bagenal touched upon this matter of the insufficiency of the mechanical motif in his recent address at a meeting of the Royal Institute of British Architects. He exposed the fallacy by a number of ingenious parallels from life outside the field of building. But we need hardly go outside our own calling to see how little we approach to exactitude. For instance, we are told that some of the piers in Salisbury Cathedral are loaded actually beyond the crushing stress of the material with which they are constructed. A scientist in the moon might take his diagrams and theoretical figures and prove conclusively that Salisbury Cathedral has fallen in ruins; nay, that it was never able to stand at all! But our eyes can prove more conclusively that Salisbury Cathedral still lifts a proud spire to the heavens.

Again, we ignorant ones may see the consistent science with which a structure may be designed to conform with the laws of equilibrium. We can trace the whole process from the facts of actual experiment, to their application to the problem of the moment. Fact and definite knowledge obtrude themselves upon us at all stages of the process, and we say to ourselves at last, "Here, at least, we have arrived at truth." And then—the scientist destroys the whole fabric of exactitude by simple multiplication with a factor of safety that is purely arbitrary! We may well wonder at this point whether we have approached structural fact any more closely than did the master builder of the Middle Ages, equipped only with a subtle "material sense." And it is here that our sense of proportion tells us that we have been watching only another human blundering towards achievement, in which human caution has, as always, been the chief factor.

The "Golden Arrow" fulfilled all that was asked of it; we are satisfied with the lines of efficiency which achievement confirmed. But perhaps it was the coat of gold and the name of an arrow that appealed most to that consciousness we all feel, that when we have done all that is asked of us, we must do still more to show there are things we feel in our hearts as well as in our heads. The concrete box may preserve men in an equable temperature and a semblance of comfort. But the home that is the belonging of an individual, the temple of a distinctive home life, must be something more than a box if the thing it stands for is not to tumble in ruins.

And here we turn back once more to the past, for a hint what to do. It has been said that the cross section of a Gothic cathedral is just a stress diagram. So are we apt to patronise. It is true that the vault is a live thing which the buttress holds in subjection, and that the pinnacle adds a crown of stability. But what if the master builder had left these structural necessities stark and unadorned? Why did he give them a graceful outline, and why those little knots of carving and enrichment? Why those lines of clear-cut shadow, and the sparkle of tracery and wall arcading? Were not these things a tribute to the "giving" instinct of man? Without them the building was but a task done, redolent of the spirit in which tools are downed the moment the whistle sounds, with relief at muscular relaxation. With them it became an act of devotion, signifying that there are more things in heaven and earth than we know of. Here, surely, must the architect of these difficult times seek a right expression for his art. Let him not be too hasty to exchange his studio for a workshop of whirling machinery; for fact and fancy must each contribute to achievement. All styles have been "modernist" in their day, but only those have lived that have been unaffected and instinctive, and have yet gone beyond the bare task a few steps into the infinite.

NOTES

A Suggested New Thoroughfare.

Amongst the many changes which modern developments are bringing about, the enormous increase in street traffic and the pulling down of such fine old buildings like Devonshire House are having great effects on the character of our streets. At the present time Bond Street may be said to be fighting for its life and for its character as a pleasant shopping thoroughfare where the leisured and wealthy have for many years found an agreeable resort. Now it is constantly crowded with omnibuses and all sorts of through traffic using it only as a means of passage way from Piccadilly to Oxford Street. Whether it is possible that its former amenity as a pleasant shopping resort can be partially restored or not, may be a doubtful question now that much better class shopping is being developed further westward. But if a comparatively narrow street like this can be relieved of some of its highly congested traffic, it would surely be desirable, and a suggestion offered in *The Times* by Mr. Geo. Skipper, F.R.I.B.A., shows how this may be accomplished.

The Proposal.

The sale of Lansdowne House suggests to Mr. Skipper the formation of a new street which would link up Conduit Street with Curzon Street, crossing Bond Street at Bruton Street. The street would disturb property of comparatively small value and pass the corner of Berkeley Square, curving round into Curzon Street below Lansdowne House. Such a connecting link as this from Conduit Street to Park Lane through the chaotic jumble of streets in that neighbourhood is worth serious consideration, and we hope the idea will not be allowed to lapse.

Posters.

The issue of pictorial posters is one of the pleasant aspects of modern artistry, and amongst the latest examples of the art, those illustrative of Surrey landscape have a notable value, especially those by A. M. Pembridge and Donald Maxwell. The latest by Mr. Pembridge is a charming rendering of the character of Surrey scenery, which is infinitely more desirable than the loud-voiced theatrical displays of much poster design.

Irregular Architectural Competitions.

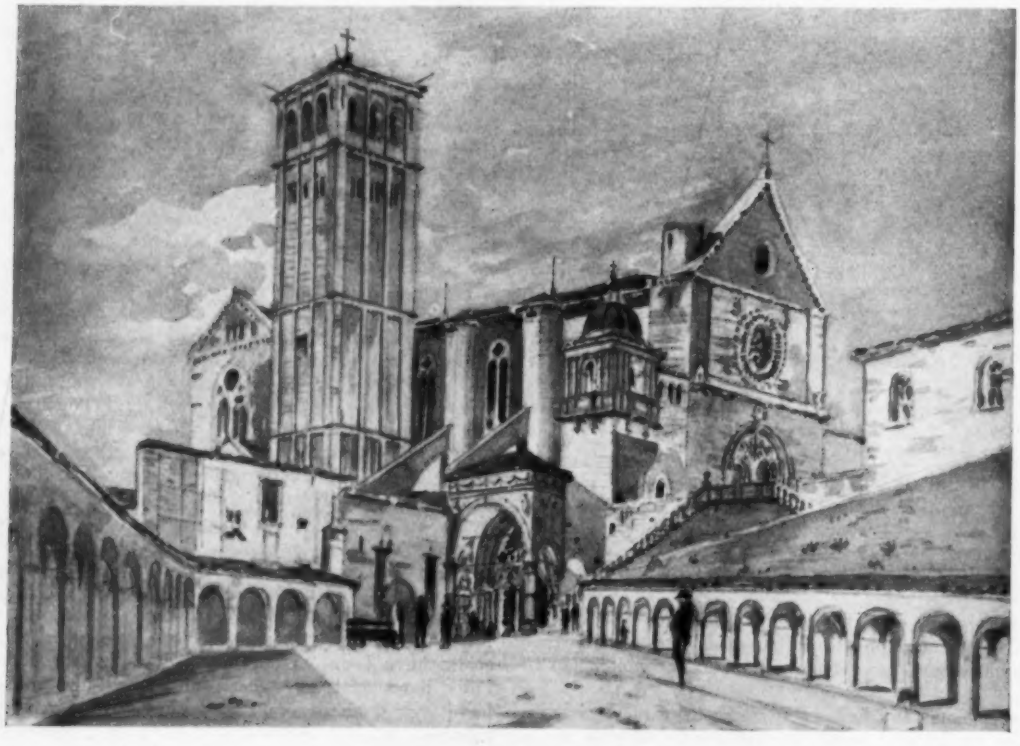
In order to avoid the possibility of circumvention of the Institute veto in the case of an irregular competition, it has been decided, on the recommendation of the Competitions Committee, to amplify Clause 7 of the Code of Professional Practice by the addition of the following words: "Nor must he (a member) be associated in any way with the carrying out of a design selected as the result of a competition as to which the Council shall have declared by a resolution published in the Journal that members must not take part." (We give the full Clause on page 649.)

Ready-Made Houses.

The *Daily News* in publishing an extract from "The Irrational House" has added a fresh caption: "Will architects please note." Presumably the advice is meant for those who build houses, but it is very much like blaming the doctor when we have only consulted the chemist. We have never ceased to wonder why the newspapers have not grasped the fact that something like ninety-eight per cent. of our houses are designed and built without architects (using the term as we know it) and that the public is simply paying for what it deserves. On the matter of clothes, for instance, the public is not in the habit of shouting from the housetops that it has a complaint that its ready-made clothing is not all that it should be. There are many things to be said about standardisation—at a price—and value for money. But only the foolish criticise a thing because it is not something else.

The Attitude of the Plasterer.

"Sir Ernest Benn's book, 'The Return to Laissez Faire,'" writes a correspondent, "contains a scathing comment upon the privileges enjoyed by plasterers. It is a point of interest that, since it was written, there have been announcements in the Press that in certain areas plasterers' wages are now fixed until 1931. 'For example,' says Sir Ernest, 'the 17,420 gentlemen who now monopolise the art of plastering are able to demand terms in money, though not in real value, which they might not secure in a free market. These



Church of S. Francesco, Assisi.

From a Sketch by Mr. Wellesley Bailey.

The Tapsel Gate, Friston, Sussex.
From a pencil sketch by Mr. F. C. Prevot.

17,420 plasterers are able to say to the rest of us: "We are ordained to plaster; we will do nothing but plaster; we will plaster just as much as we decide and on the terms that we arrange, and nobody shall plaster but us." It is impossible to blame the plasterers, who are allowed by stupid public opinion to adopt and maintain such an attitude, but it is also impossible to deny that when plasterers, bricklayers, masons, carpenters and all the other tradesmen that go to make up the building trade adopt with success the same attitude, the effect of their arrangements is to limit the building market so seriously as to keep us all in discomfort in the matter of houses, and to keep all the innumerable trades that follow the builder in a state of unemployment.

The Consequences.

We who lay claim that we have the interest of the art of building at heart, have already discussed the attitude of the building trade in relation to its own future. The points raised need not be elaborated. We regret with Sir Ernest Benn that nobody puts a penny into bricks or mortar unless he is obliged, and particularly do we regret the inroads upon our traditional methods of building. Upon these matters we believe that many engaged in the building trade agree that the industry is maintaining an attitude that may have very serious consequences.

Aberdeen Improvements.

Aberdeen is a city held in high esteem for its architectural interest not only in old but also in modern buildings, and the present proposal for a fine square and a new Cathedral carried out will further add to its reputation. We are not sure whether Mr. Comper's new Cathedral is placed exactly in the most desirable spot in the published scheme, but the scheme as a whole gives great promise as a fine city development.

Tapsel Gates.

What is a tapsel gate? "Sturdily built of timber," writes a correspondent, "tapsel gates swing not on hinges at the side, but on a great timber centre pin set in the middle of the path. No doubt they were contrived for the convenience of funeral processions entering the churchyard, for when the gate is turned on its pivot the double line of pall bearers is able to pass through on either side. How they came by their name or what it means is no longer known, and the word 'tapsel' is not to be found even in the great New English Dictionary, which has embalmed so many odd words and phrases." Tapsel gates, according to our correspondent, are peculiar to Sussex and are rapidly disappearing. Examples still exist at Friston, East Dean, Kingston (near Lewes), Jevington and Pycombe. It would be interesting to know the derivation of the word."

Tower of the Municipio, Verona.
From a Sketch by Mr. Wellesley Bailey.

GENERAL NEWS

Professional Announcements.

Mr. C. McArthur Butler has removed from 28, Bedford-square, to 8, Glen-road, Boscombe, Bournemouth (Telephone: Bournemouth 4903). Mr. McArthur Butler will continue to carry on his professional engagements in London.

Mr. Maurice William Jones, of Knowle, Bristol, has been appointed surveyor for the diocese of Worcester, in succession to Mr. A. H. Parker, who has held the position for the last 30 years. Mr. Jones, who was articled at Knighton, has had experience of similar work in the Hereford diocese, and has had experience as an architect for ten years at Hereford, Ludlow, Leominster and Bristol.

Scaffolding Accident, Kensington.

Ten men were injured, six seriously, as a result of a scaffolding accident on Tuesday at the premises of John Barker & Co., Ltd., Kensington High-street. The men, who were employed in decorating the interior, crashed on to a stone floor when a plank broke. The men were spring cleaning in the north block of the building, in the carpets and furnishing department

New Council Offices, Hatfield.

The Rural District Council of Hatfield have decided to erect new Council offices, the sanction for which has been obtained from the Ministry. Mr. Percival C. Blow, A.R.I.B.A., of High-street, St. Albans, has designed a building in the Georgian style, and the work of erection has been entrusted to Mr. W. F. Bailey, of Queen-street, Hitchin.

Garden Cities and Town Planning Association: Whitsun Tour.

The spring tour of this Association will this year be to Holland and Germany. The itinerary is to be The Hague, Amsterdam, Frankfort, Cologne, Düsseldorf and Essen, with the Local Authorities of whom arrangements for guides have been completed. The party leaves Liverpool-street at 8.15 p.m. on Wednesday, May 15, and returns on Saturday, May 25. (A curtailed tour lands the participant back in London on May 18.) Prices, inclusive of railways, meals, transport and first-class hotel, are 25 guineas and 10 guineas (for the curtailed trip). Application should be made to the Secretary, Garden Cities and Town Planning Association, 3, Gray's Inn-place, W.C.1.

Preservation of the Prioratus, Bedford.

It is interesting to hear that the Prioratus at Bedford is to be preserved and restored under the guidance of a committee of local antiquarians, with Mr. George P. Allen, F.R.I.B.A., as architect. The building, dating back to the thirteenth and fourteenth centuries, was the town house of the Prior of Newnham, and afterwards granted by the monks for the meetings of the Guild of St. George.

Proposed Hospital, Hammersmith.

The governors of the Queen Charlotte Hospital for Women have acquired a site of five acres in Goldhawk-road, W.6, for the erection of their new hospital. The first section to be erected will be the isolation block for puerperal fever and will be of five floors. The governors have appointed Mr. E. Stanley Hall, F.R.I.B.A., 54, Bedford-square, W.C.1, as architect, and the plans are now being prepared.

Preservation of Stonehenge.

We learn that the sum necessary for the purchase of the third plot of land surrounding Stonehenge has been subscribed and the National Trust will, therefore, be able to carry through the purchase.

A.A.S.T.A. Tours.

We are informed that a party of twenty visited Brussels, Antwerp and Bruges last week end under the auspices of the A.A.S.T.A. The Association are running a ten days' tour to Germany in September. Further particulars may be obtained from the Secretary, A.A.S.T.A., 26, Buckingham Gate, S.W.1.

COMPETITION NEWS

Garage in the Theatre Area of London.

The designs submitted in the R.I.B.A. competition for the Design of a Garage in the theatre area of London will be on exhibition in the R.I.B.A. Galleries, 9, Conduit-street, W.1, from April 9 to 20, inclusive, between the hours of 10 a.m. and 8 p.m., Saturdays 5 p.m. The prize money was presented to the Council of the Royal Institute of British Architects by Mr. H. S. Horne, of 74, Park-street, London, W.1. The first prize is a sum of £350, and, in addition, £140 will be divided at the discretion of the assessors between competitors whose designs are considered specially meritorious.

Poster Design Competition.

The International Exhibition of Modern Commercial Architecture will be held at the R.I.B.A. from May 7 to June 8. At the request of the Exhibition Sub-Committee, the Board of Architectural Education arranged a competition for the design of the exhibition poster, and this competition was open to students of the Recognised Schools of Architecture. Twenty-five designs were submitted, and the Exhibition Sub-Committee have now made their award as follows:—

1st Prize (£10): Mr. J. A. Pinckheard (Northern Polytechnic).

2nd Prize (£5).: Miss K. Winter (Architectural Association).

3rd Prize (£3): Mr. W. G. Holford (Liverpool University).

It is hoped to make arrangements for exhibiting the designs at the R.I.B.A. in the near future.

MEETINGS

Saturday, *April* 6.

Edinburgh Architectural Association. Visit to Hopetoun and Midhope.

Monday, *April* 8.

Royal Institute of British Architects. Major-General Sir Fabian Ware on "The Work of the Imperial War Graves Commission." 8 p.m.

Society of Engineers. "Notes on the Inspection of Public Works." By Mr. G. H. Gardner. 6 p.m.

Surveyors' Institution. Mr. Benaiah W. Adkin on "The Education of a Young Surveyor." 8 p.m.

Tuesday, *April* 9.

Institution of Civil Engineers. Discussion on "The New Piccadilly Circus Station." By Mr. H. Hall. 6 p.m.

Wednesday, *April* 10.

Institute of Fuel. Major William Gregson on "Waste Heat Recovery." 6 p.m.

Liverpool Architectural Society. Annual General Meeting.

Thursday, *April* 11.

Southern Counties Federation of Building Trades' Employers. Visit to the Research Laboratory, Princes Risborough.

Institution of Structural Engineers. Mr. F. M. Du Plat Taylor on "Casing Piles Damaged by Marine Worms in Reinforced Concrete; and other Repairs at Swanage Pier." 6.30 p.m.

A Corner of S. Francesco, Assisi.
From a Sketch by Mr. Wellesley Bailey.

CORRESPONDENCE

"Architects and Decorators."

Sir,—The debate at the R.I.B.A. on the subject of "The Relations between the Architect and the Decorator," reported in your issue of March 29, shows a considerable amount of ignorance as to the attitude of the architect towards his work. Mr. Giles's opening remark that "*many architects did not know the difference between a builder and a decorator*" was rather unfortunate. His definition of an architect might prove interesting. To quote again: "*a great architect* (some critics say there are none) *had so much to do for his clients that it could not pay him to give his time to such a special branch as decoration.*"

Admitting that the decorator is a specialist he cannot be classed with such specialists as ferro-concrete, heating and electrical specialists, for the simple reason that his work plays so great a part in the visible æsthetic whole of the work. One would naturally think that the greater the architect the greater his desire to control and supervise the finishing touches of his work. To quote again: "*It saved such an architect a considerable amount of trouble, and saved serious mistakes being made in decoration and in the details of interior woodwork, furnishings, fittings, etc.*" Surely no architect wishes to be saved the trouble of doing the things which he, as a designer, most enjoys doing.

To quote individual cases might only lead to the formation of wrong conclusions, but it is clear that where decoration (real decoration) has to be considered in relation to real architecture, the architect must be the controller. No mention seems to have been made of the theme or subject. In mediæval work the harmony between the architectural theme and the decorative theme is most extraordinary. The failure of sculptors and stained-glass craftsmen particularly, in modern work, to harmonise their work with architecture, is entirely due to this ignorance of the fusion necessary to make the work a complete whole.

With decorators, as a rule, the divorce is even greater. The personality of the decorator should be subservient to the theme. That is, the theme itself should determine the limitations of expression. This subject is fascinating and endless, but I will not encroach further on your valuable space except to quote from a lecture on "Fresco Wall Painting," given recently by Mr. Thomas Wilson, Deputy-Keeper of Westminster Hall. Speaking of the work of the Westminster School of Painting, he said:—"*But these works showed a touch in the execution which so exactly corresponded with the nobility of the subjects chosen that it seemed true to say that the vision of the painters appeared to move freely in regions of the Infinite. They all seemed to hold a consecrated quality of vision, and it fused as an attribute in their achievement through the very perfection of the material side of their art.*" It is not a question of who is to be top-dog, but how is the finest work to be achieved? Unity of theme from foundation to finial is the only way that fine work has ever been done or ever will be done.

William Davidson.

Symbolism.

Sir,—Mr. C. F. A. Voysey, in his letter on "Symbolism" that appeared in your issue of March 15, says that "in old time the rose was at once recognised as the symbol of love." I should be interested and grateful if Mr. Voysey would state his source of information for this. Though I am fully aware that the idea is now current that the rose symbolises love, I have not been able to discover how it originated, nor have I met with evidence that would suggest that it has a very old tradition.

From earliest Christian times the rose has symbolised the superlatively beautiful; the perfection of a kind, the plural symbolising a superlatively beautiful place indicated in language by such phrases as "a place where roses bloom." The early Christians employed the rose as a symbol of the Virgin Mary, thus denoting her as the rose of womanhood; and Italian pictures with the title Santa Maria della Rosa became common during the Renaissance. A representation of roses symbolised Paradise, and employed in this sense roses appear on the tombs in the catacombs, and in Fra Angelico's frescoes as the flowers that bloom in Paradise.

Mr. Voysey also says that "the crown, being the band round the head, denoting self-control and the control of the heart (viz., the emotions) by the mind. And on that account given to kings, as no one can properly control others unless able to control himself—that is to say, of course, in a noble way." Again, I should be grateful if Mr. Voysey would state his source of information for this, as it is a pretty idea, for I have been unsuccessful in discovering such a meaning given to it in any period of history.

The crown in ancient days, it must be remembered, had no regal significance. In Greece and Rome it was awarded as the prize of honour and victory; the crowns representing the highest awards, usually being of the least material value, taking the form of wreaths of laurel, myrtle, and oak; the mural crown, valour and rostrate, which were all of gold, ranking below them. The early Christians used the Pagan crown as the symbol of the victory of martyrdom over earthly life and the world in the cause of their faith.

The modern regal crown is a development of the ancient diadem, which was oriental in origin, and was usually an embroidered fillet of linen or silk. There is no evidence, as far as I am aware, that it originated in any other way than as an ornament of dress.

Arnold Whittick.

Plumbing and the Architect.

Sir,—If "P.Q.X." buys a type of house which I know of, he will find all the reception-rooms and best bedrooms on the south and west in order that he may enjoy all the sun that is possible. The result of this good planning and proper siting is to throw baths, w.c.s and sinks to the north and east sides. Cold-water tanks are not placed in the roof to save expense but to obtain gravity.

Is it not better to have all the sun in our living rooms and run the risk of pipes freezing for a short time in the winter? This latter, indeed, will be avoided if the householder keeps up the temperature of the house during the day and empties all the cold-water tanks at night—a few minutes' work. It is useless to allow the pipes to freeze and then blame the plumber; it is pure carelessness.

R. O. Garrard.

"THE BUILDER" DEBATE

XVII.—IS THE ARCHITECT SUFFICIENTLY TECHNICAL?

Sir,—"Positive" has tabled rather a sweeping motion, and it would seem that he quickly repented of its catholicity, in that he has devoted the whole of his argument to the subject of plumbing, although he apparently intended to cover the whole field of ordinary building construction to the last word in heating and ventilation, and perhaps wireless and automatic telephones. I am a little at a loss whether I am to defend the profession against the sin of omission in all these matters, or whether I am to follow my opponent's lead and devote my remarks to the one subject chosen.

At any rate I am safe in dealing with that one first. "Positive's" argument has no meaning at all if it is not an assertion that the average house designed and supervised by an architect is deficient in forethought as regards the run of pipes carrying water. I do not know whether "Positive" has access to statistics that are unknown to me, but I suspect that he has no more foundation for stating this than the lame instance he quotes to substantiate his statement, viz., that he has never yet seen an architect's plan that showed on it the run intended for the cold-water service. Now, I have seen such a plan, but admit that such cases are rare; I submit that common practice in the delineation of house plans does not prove that the runs of water pipes do not receive their due consideration. The practice of architecture does not begin and end with the drawing of a plan, or it would be a very paying proposition. "Positive" may not know what the supervision of an architect means. I can tell him that it is one long sequence of fussing and nursing from beginning to end of a job, and that not only are countless things considered that are not shown, and cannot be shown, on a plan, but that a good many things that are shown become altered out of all recognition as far as the plan is concerned.

I am not sure that the architect does profess to be an expert in building, or that the more humble of us profess to be able to teach the expert craftsman his craft. At any rate we do not profess to be leaders of science, but only exponents of the scientific practice of the age, as far as building practice is concerned. It is, then, a little unfair to say that the average practice in building (the bulk of which is quite outside the control of architects) neglects the question of the sensible design of pipe runs, and to blame the architect in particular because he fails to rise above the average building practice of his times. It is a double injustice because it assumes a claim which the architect does not make, and assumes an omission of which he is more often than not guiltless.

"Positive" declares that the public employs architects because the latter are expected to produce the perfectly constructed house. In saying that the practice of architecture would soon die out if this were not the case, he implies that this is the only reason that prompts the public to employ architects. Now I should say, reading between the lines, that "Positive" is just one of those sort of people who are for ever talking of architects as "unpractical" men, and most likely revelling in that foolish story of the architect who forgot the staircase—that evergreen that crops up in every district in the country, and always attributed to a certain local practitioner. If he is not one of these, "Positive" must at least know that any capable and honest builder can produce a house that is structurally perfect, without any assistance from the architect. What he cannot do, if left to his own devices, is to produce one that is conceived in taste and co-ordinated in execution. The mistakes such a builder will make are not matters of sound construction or common sense, but of skilful planning, proportion, and detail. This being the case, as it most certainly is, it is obvious that when a member of the public employs an architect he does so because he wants his house to express something besides efficiency. If he only wanted the latter he could get the same service by employing a clerk of works, and if he only wanted a policeman to shadow the defaulting contractor he would certainly not be content with the services of a professional man whose visits to the job were not more frequent than once or twice a week.

"Positive" has made a complaint without going to the trouble of verifying either whether there is anything to complain about, or whether, if there is anything to complain about, he has picked upon the right culprit.

Negative.

MODERN SYMBOLISM

By C. F. A. VOYSEY.

Symbolism is the oldest of the arts and must for ever be man's expression of his dependence on man. The printed page has had a long innings and has led some to forget the existence of ideas in things. Our materialistic temper has caused us to count only sensuous qualities in things material, and so we are contented with the pleasures derived from form and colour, light and shade, texture and tone.

The habit of reasoned likes or dislikes is a healthy and stimulating state of the intelligence; it is a state in which we are forced to discern the thought and feeling that precede mechanical action. We are thus led to distinguish between the machine and the human production and to classify the human product according to its evidence of spiritual, intellectual and technical excellence. Mere cleverness will cease to satisfy us when we have learnt these distinctions, and then the symbolism of all times will fascinate us and enrich our lives.

Fig. 1.

Is it not interesting to question why a triangle suggests emotion and a circle intellect; and what are the fundamental truths behind form which lead to this difference? The twofold nature of man, namely, matter and spirit, seems to suggest the right answer to this question. Material prosperity stimulates our interest in material things, as much as material things lead us to seek prosperity. Sorrow and suffering stimulate our interest in spiritual ideas. The spire, a spear head and lightning are all associated with ideas of conflict and movement—the very opposite of smoothness, roundness and repose. A luxurious, self-indulgent age seeks to avoid conflict, and finds its language in the round arch. Whereas the struggling and aspiring age expresses itself by means of the pointed arch and spire.

I do not wish the reader to be concerned with the question as to the authorship of the designs here shown or to question their artistic merits or demerits, but rather do I invite him to concentrate his attention on the ideas they display, which are the common property of us all.

Fig. 1.—The Civic Survey of Greater London for its badge has two good spirits—one casting light and the other recording. That is to say, the collecting of facts and the making of diagrammatic records of the same; the ribbon being left for the insertion of the date when the diagram is made to which the badge is attached.

Fig. 2.—The inscription, together with the conventional forms, were all selected by the owner and speak for themselves.

In Fig. 3 we have the oak of sturdy growth and the heart signifying the emotions and affections. The crown or band which is usually placed round the head is the original symbol of self-control, indicating the fact that the mind (that is, the reason) must control the emotions. Hence its position in this design round the heart. The crown itself is composed of fleur-de-lis, which stands for purity. The flame signifies the soul; flame, being one of the most indefinite forms in the world of matter, seems on that account to be a suitable symbol, and it is also a warming and a purifying medium. It is placed at the centre of growth and at the base of it, as, literally, it is the heart and core of all things. The proportional compasses symbolise logic; given a dimension at one end, the equivalent naturally and logically follows at the other The lantern or light that is caged in and confined by the material body denotes psychology, namely, the light that gives understanding. The egg is the symbol of "form," being the universal beginning of all animal life. The scales stand for law and justice. The spade is the symbol of economics; it is the instrument by which material is made to fructify. The white heart stands for ethic, or virtue, ethical thought depending more on feeling than on reason. The human hand grasping the old familiar sign of the Divine denotes religion; the essence of religion being the conscious relation of the creature to its Creator. The eagle, which is the highest flyer and the furthest seer, stands for aspiration and revelation, the Heavenward quest, which, in other words, is true philosophy and constitutes the chief interest of the owner of this book-plate.

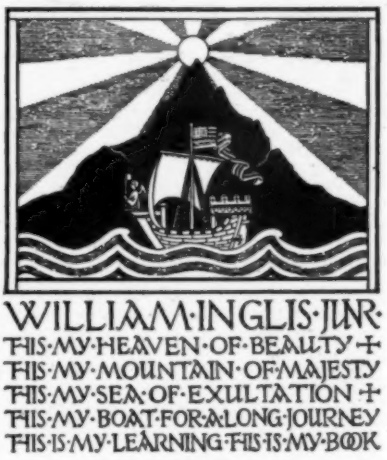


Fig. 2.

Fig. 4.—This book-plate was designed for a lady who was fond of reading, mountain scenery and travel; which latter the ship denotes. The forest in the middle distance and the wild beasts of the night are meant to indicate the kind of literature most favoured by the owner.

Fig. 5.—The angels bearing the heart of sympathy rise from the very ancient conventional symbol of cloud. From the heart grows the fruitful vine entwining signs on shields denoting proportion, music, science, sculpture and painting.

Fig. 3

Fig. 4

Fig. 5.

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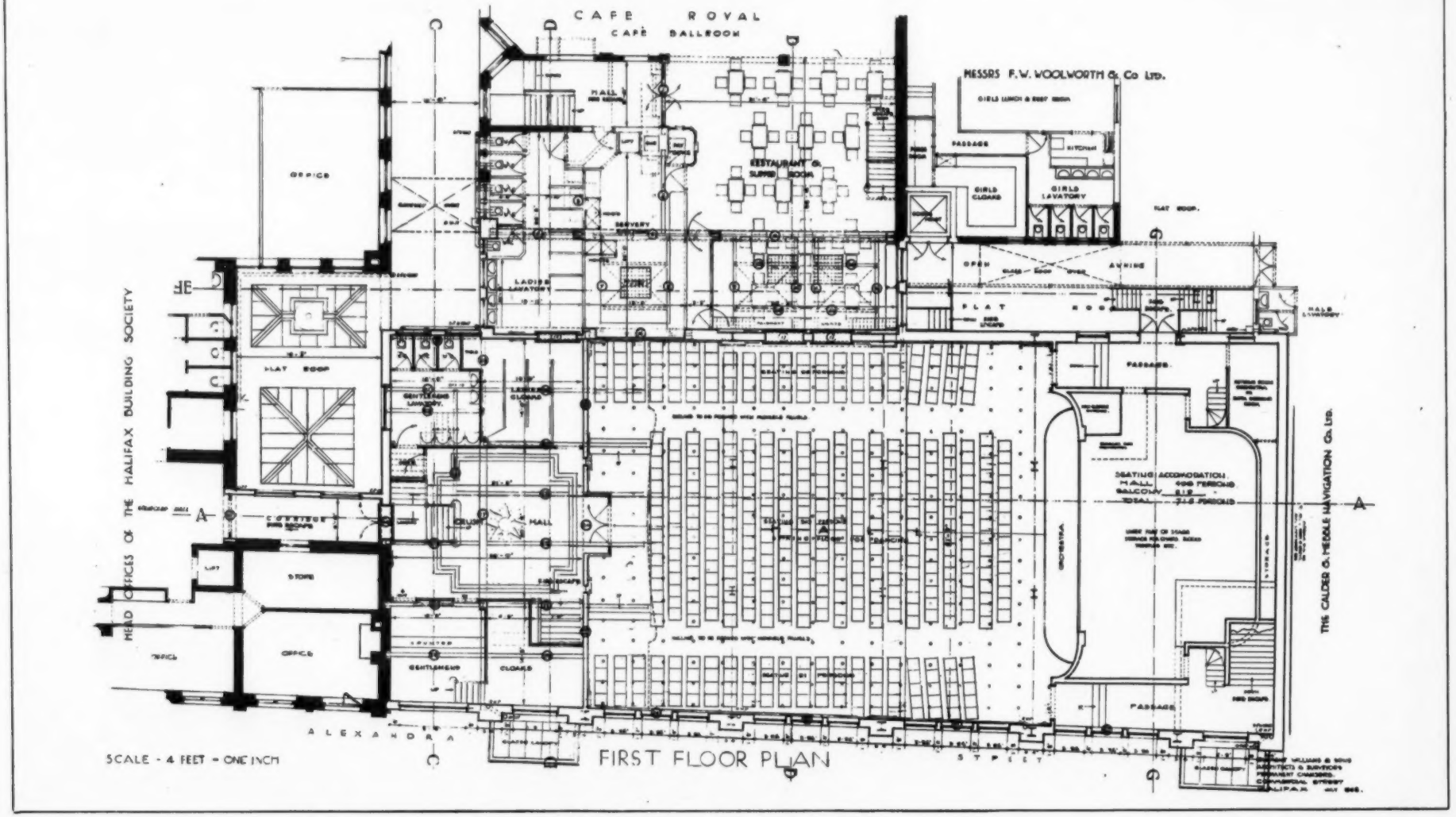
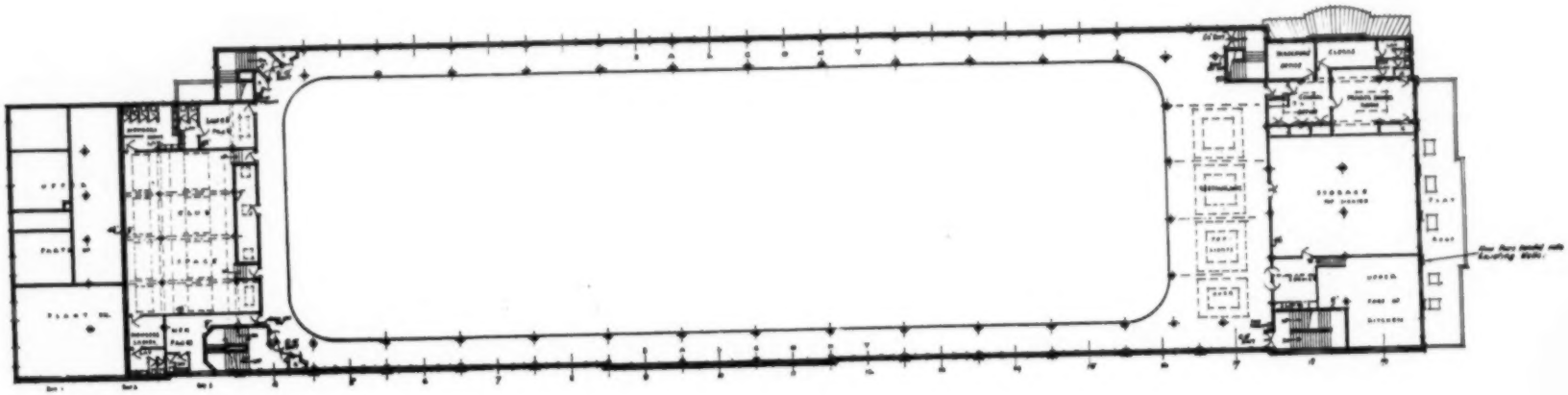
ALEXANDRA HALL

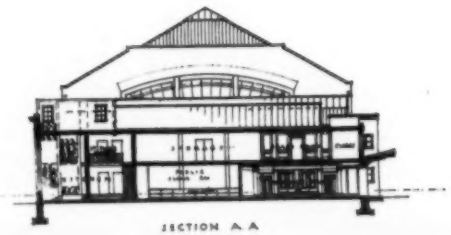


PROPOSED ALEXANDRA HALL, SHOPS, &c., HALIFAX.

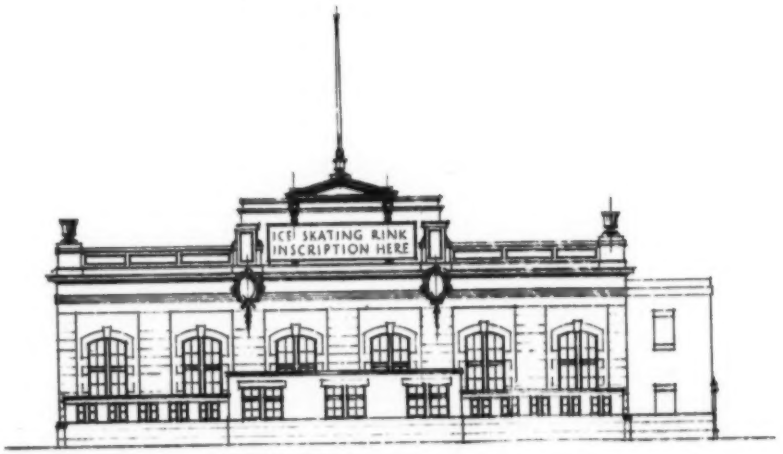
Messrs. Clement Williams & Sons, Architects.



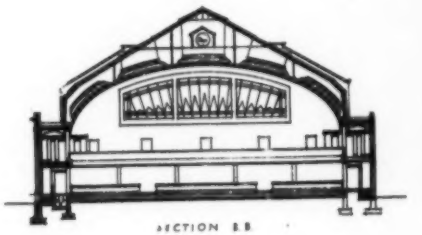
FIRST FLOOR PLAN



SECTION A.A



(North) ENTRANCE ELEVATION

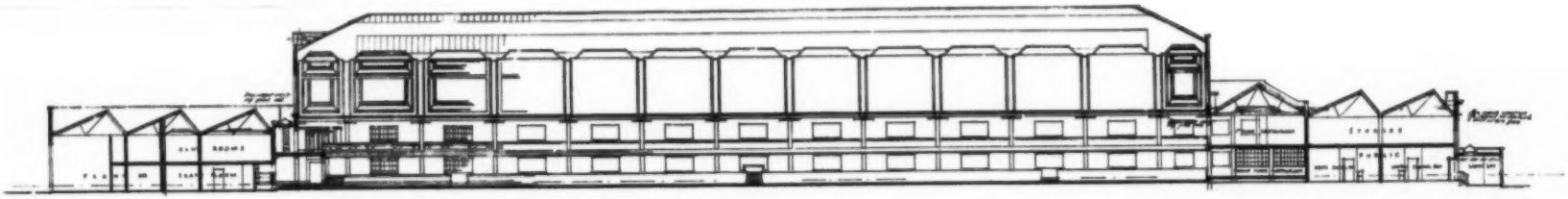


SECTION B.B

SECTION A A

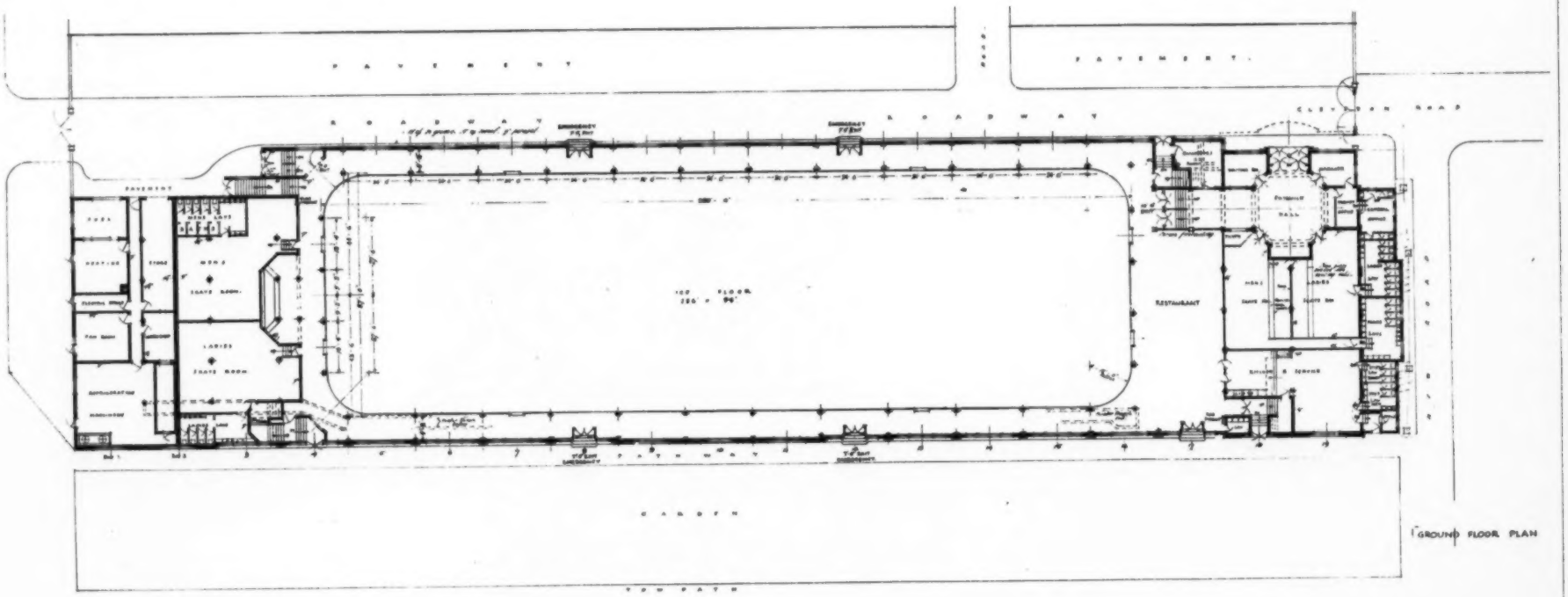
(NORTH) ENTRANCE ELEVATION

SECTION B B



SECTION C C.

GENERAL SECTIONS



GROUND FLOOR PLAN

THE RICHMOND ICE RINK.

Mr. S. Clough, F.R.I.B.A., A.R.C.A., Architect.

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ILLUSTRATIONS

PLATES

The New "Alexandra Hall," Halifax.

One of the most pressing problems of administration arising from the expansion of the business of the Halifax Building Society in recent years has been the necessity of providing adequate accommodation for the safe custody of the ever-increasing number of parcels of title deeds, comprising the Society's mortgage securities. After providing what was thought to be adequate accommodation for years to come, the directors found themselves faced with the prospect of shortage of accommodation, and decided to embark upon a further scheme of extension. For this purpose the vacant plot of land adjoining the head office was secured, on which the building which we illustrate is now in course of erection. This will comprise five floors in all.

In the basement will be situated extensive strong rooms, which will be more than twice as large as the combined area of the old and the recently extended strong-rooms. The remainder of the basement will be fitted up with heating and domestic hot-water plant and storage. The fuel will be oil, which will automatically feed all the boilers by gravity from elevated storage tanks. This plant will deal with the whole of the three premises. On the ground floor three shops will be erected together with storerooms and entrance and exit hall to the main public hall above. One of these shops will be a double shop so arranged as to form a substantial addition to Messrs. Woolworth's premises. At the first-floor level a public hall will be provided with a seating capacity for 700 persons, together with a large approach crush hall and ample cloakroom accommodation. Special attention has been given to the acoustics in designing the hall. At the east end of this hall a drop curtain stage will be erected.

The Cafe Royal in King Edward-street, which has been purchased by the Society, has been incorporated into the scheme, along with the existing building society premises. When complete the three buildings will form one large scheme with communication on all floors to each other. The Cafe Royal and the new hall are planned so as to be used as one unit or separately, with approaches or exits in King Edward-street or Alexandra-street, as desired. On the second floor level will be placed the hall gallery and the stage galleries, the remaining portion being the upper portion of the hall. Above the public hall on the third floor a staff administration hall is to be erected to accommodate a staff of about 200 persons. At this level over the Cafe Royal a cooking and general kitchen will be built for serving either the Cafe Royal or the public hall. The elevation to Alexandra-street will be in ashlar, bronze and cast-iron. The premises will be fireproof and mechanically ventilated, special attention having been given to fire prevention and fire escape.

The sub-contractors up to date are as follows :—Craven, Robinson and Sons, excavating; Crossley and Radcliffe, masonry; John Berry, ironfoundry; James Turner, joinery; Thos. Boocock and Sons, plumbing; Rushworth and Firth, slating and plastering; the Leeds Fibrous Plaster Co., fibrous plaster work; Rosser and Russell, heating.

Messrs. Clement Williams and Sons, of Halifax, are the architects.

Richmond Ice Rink.

Situated at Clivedon-road, Richmond, close to the Thames, the Richmond ice rink has been converted to its present purpose from the old Pelabon munitions works, a building erected during the war.

The rink is 470 ft. in length, 106 ft. wide, and 63 ft. in height, while the ice surface has a length of 286 ft. and a width of 85 ft., which is approximate to an area of 24,300 sq. ft. The rink may be used for many classes of ice sports simultaneously, it being possible to hold hockey matches, skating exhibitions, and speed skating under favourable conditions.

Special refrigerating machinery has been devised which permits of a large range in the temperature, density, and texture of the ice, thus making it practicable to provide any kind of ice required, and allowing the rink to be adapted for all classes of skating and curling. The maintenance of the ice surface is under the control of a supervisor and trained staff, and the periodical planing, scraping, and sweeping of the surface is performed by electrically driven machines. The ice surface will accommodate approximately 1,000 skaters, and the promenade and balcony 2,500 persons. The base of the floor is heavy concrete, upon which are laid cork blocks for the purpose of insulation, and over these is a thin layer of concrete and the brine pipes, next to which comes the ice. The water used is taken from the river and subsequently returned after refrigeration. Some 15 miles of piping have been installed beneath the floor for the purposes of refrigeration.

The whole building is heated at an equable temperature and ventilated by special machinery, while the electric lighting scheme and the internal decoration have been specially designed. The subsidiary accommodation in the building meets all the requirements of a skating rink, and at one end are provided private skate-rooms, cloak-rooms, bathrooms, as well as club-rooms, secretary's office, and committee rooms. A lounge is provided measuring about 70 ft. by 24 ft., while the accommodation allows for the serving of meals to club members and the public in proximity to the ice.

Mr. W. G. Holford.

(Awarded American Travelling Scholarship, Liverpool School of Architecture)

Mr. William Graham Holford has been awarded the £300 American Travelling Scholarship given to the Liverpool School of Architecture by the Society of Arts and Sciences of America. Mr. Holford was born in Johannesburg, South Africa, in 1907, and educated at the Diocesan College, Rondebosch, near Cape Town, where he held a scholarship. He came to England in September, 1925, and has been a degree student of the Liverpool School of Architecture since that time, having this term completed the fourth year of his five-year course. The Board of Selectors for the Scholarship included the Professor of Architecture, all the instructors in design in the school, as well as the Vice-Chancellor, the Dean of the Faculty of Arts, Sir Reginald Blomfield, R.A., Sir Edwin Lutyens, R.A., and Sir Giles Scott, R.A.

The new building is in the free French Renaissance style, constructed of brick and cast stone. The work was completed in 4½ months from commencement.

The principal contractors and suppliers in connection with the construction of the new rink were :—Messrs. E. D. Winn & Co., Ltd., general contractors; Messrs. Le Brun, Vimy, Mons, Belgium, and Latona Engineering Co., Ltd., refrigerating plant; Newall's Insulator Co., floors; The Ragusa Asphalte Paving Co., Ltd., asphalt; The Invictus Flooring Co., Ltd., floors; Rubery Owen & Co., Ltd., steelwork; H. H. Martyn & Co., Ltd., fibrous plaster ceiling; The British Challenge Glazing Co., lighting; Williams, Smith & Evans, pantiles; Turner Bros. Asbestos Co., Ltd., roofing; J. W. Singer & Son, metal lay lights; Grierson, Ltd., electric lighting; The Plasm Decoration Co., Ltd., cast stone; The Air-Vent Heating Co., heating and ventilating; The Adamite Co., Ltd., "Colemanoid."

Some notes on the treatment of the rink floor are given on page 664.

Mr. Sydney Clough, F.R.I.B.A., is the architect.

"Mill Barn," Oxted, Surrey.

"Mill Barn" has been designed for the occupation of Mr. H. Edmund Mathews, F.R.I.B.A., and his family. It occupies a sloping site on the southern side of Oxted, with uninterrupted southern views to Crowborough and Ashdown Forest, in Sussex. The land also slopes to the east, running down to the Oxted Mill Ponds, giving opportunities which have been developed in the planning of a terraced garden.

Two old oak-framed barns were purchased in Sussex. One barn was re-erected as the living-room (36 ft. by 20 ft.), and the timbers of the other barn were re-used in half timbering the remaining portion of the house. The building is two stories in height, faced on the outside with Dutch bricks. The walls surrounding the terrace garden on the south side of the house are also faced with Dutch bricks, the other terraces being formed with local sandstone.

The removal, transport and re-erection of the barn was in the hands of Mr. C. A. Williams, of Oxted; the remainder of the building was erected by Messrs. Bull and Esdaile, of Oxted and Kennington, S.E., the architects being Messrs. J. Douglas Mathews, Son and Ridley, of 3, Paul's Bakehouse-court, E.C.4, and 75, London-road, East Grinstead, Sussex.

James Murray's Royal Asylum, Perth.

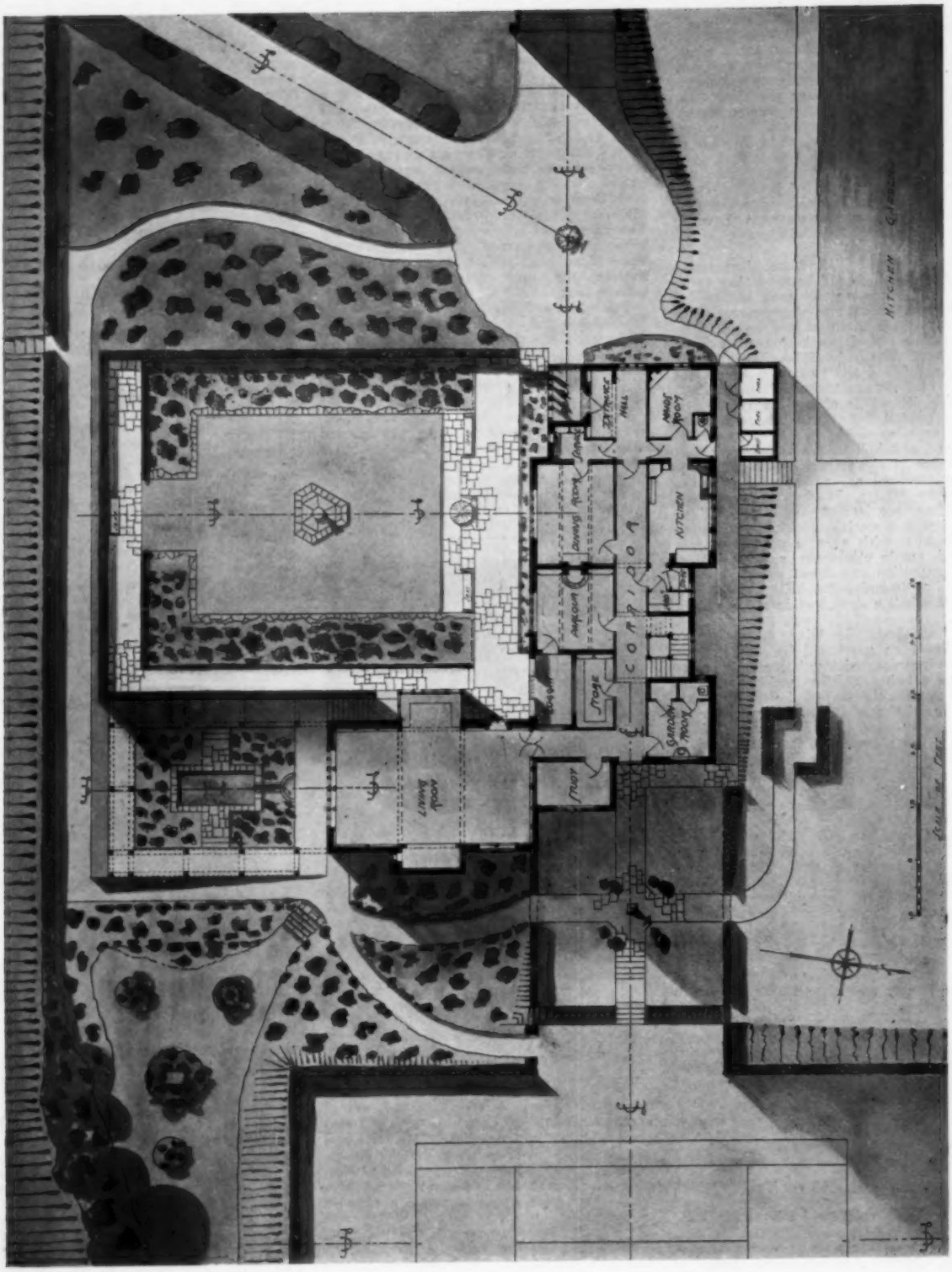
In the limited competition for a proposed new reception hospital block at this institution the design of Messrs. Smart, Stewart and Mitchell, of Perth, was awarded first place by the assessor, Mr. George A. Paterson, F.R.I.B.A. We illustrate the design this week.

Irish Domestic Work.

A number of small houses have been recently built in various parts of Ireland from the designs of Mr. W. J. Brown, F.R.I.B.A. A selection of these is illustrated in this issue.

Branch Public Library, Birmingham.

In order to provide rooms of the required areas in this branch library it was necessary to occupy (i.e., to roof over) the whole of the site. All the public rooms are on the ground floor, efficiently top lighted and arranged on the "open access" system. All partitions are fully glazed, the whole being supervised from the counters. The facing bricks and quoins were supplied by Messrs. Lawrence, Bracknell, the cast stone by the Empire Stone Co., Ltd.; the roofing tiles by the Hartshill Brick and Tile Co.; the wrought ironwork by J. R. Pearson, Ltd., of Aston; the wood block floors by the Patent Oak Flooring Co.; the roof glazing by Mellowes, of Sheffield; and the heating by Haden and Co. The whole work has been erected by Messrs. W. and J. Webb from the plans and under the superintendence of the architects, Messrs. John P. Osborne and Son, of Birmingham.



"Mill Barn," Oxted, Surrey: General Lay-out.

Messrs. J. Douglass Mathews, Son & Ridley, Architects.

VIEW FROM SOUTH-WEST.

VIEW FROM SOUTH.

"Mill Barn," Oxted, Surrey. MESSRS. J. DOUGLASS MATHEWS, SON & RIDLEY, Architects.

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"Mill Barn," Oxted, Surrey: The Living Room.

MESSRS. J. DOUGLASS MATHEWS, SON & RIDLEY, Architects.

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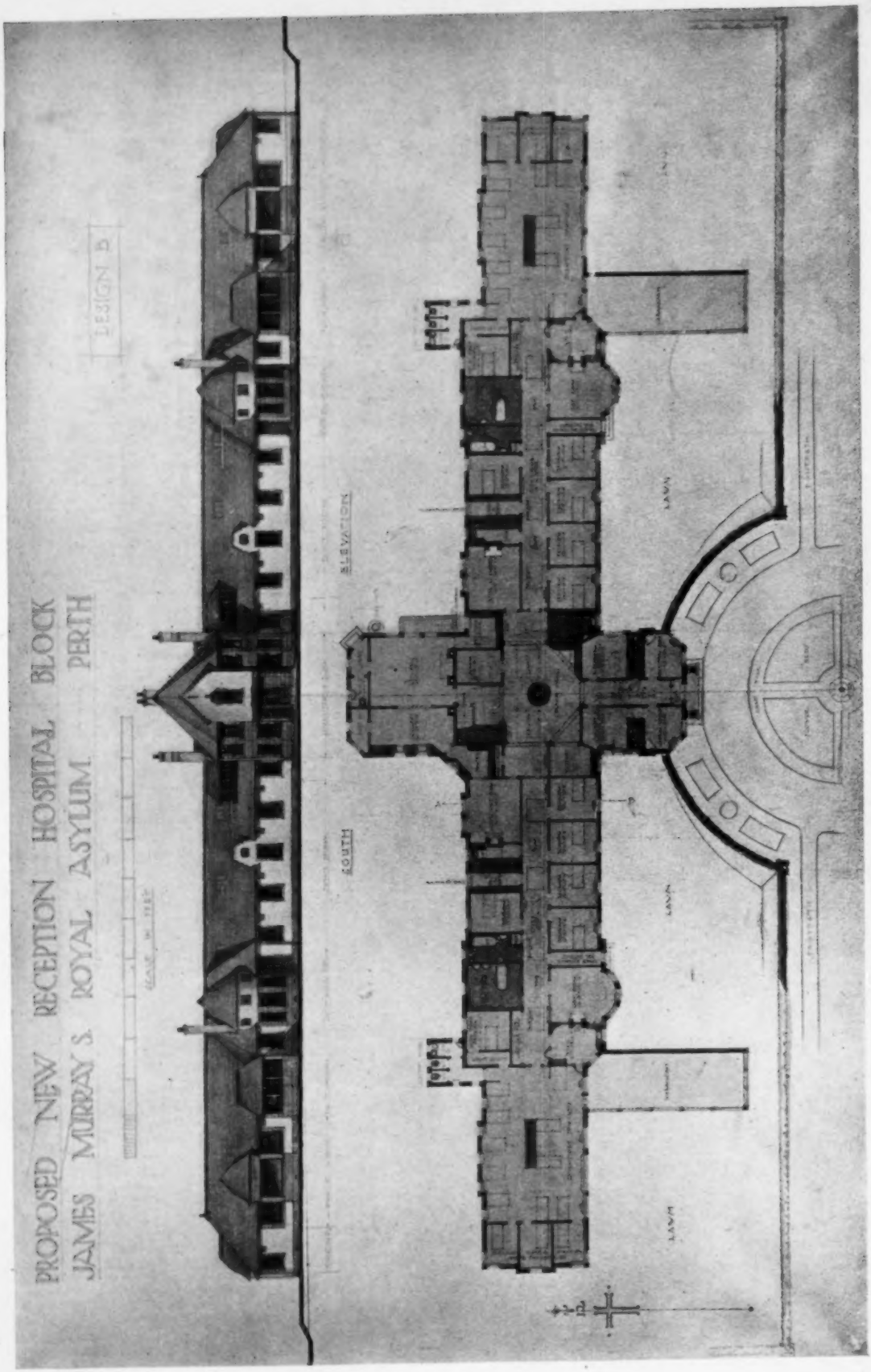
Dining Room.

Parlour

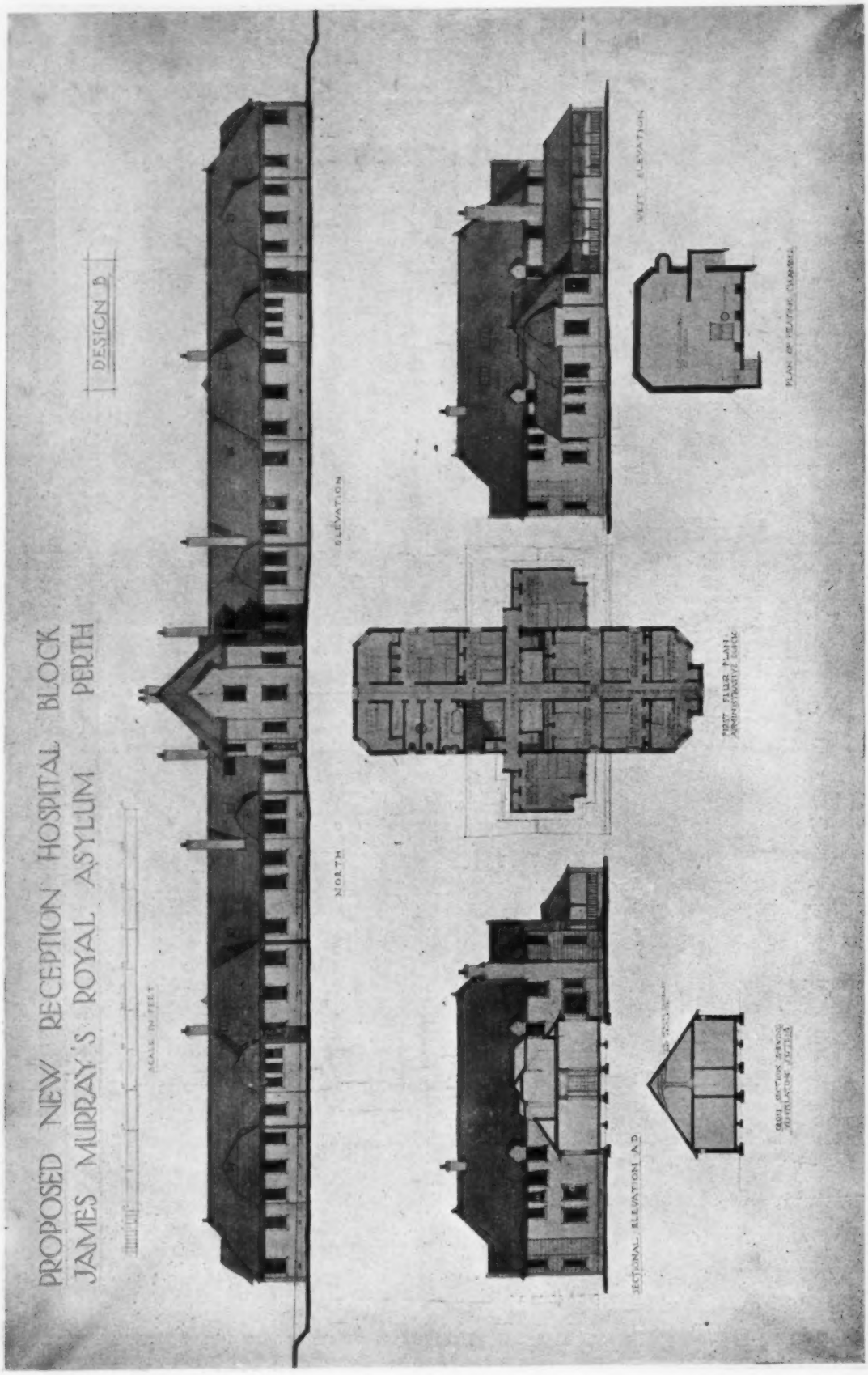
"Mill Barn," Oxted, Surrey.

Messrs. J. Douglass Mathews, Son & Ridley, Architects.



Competition for Reception Hospital Block, James Murray's Royal Asylum, Perth: Selected Design.

Messrs. Smart, Stewart & Mitchell, Architects.



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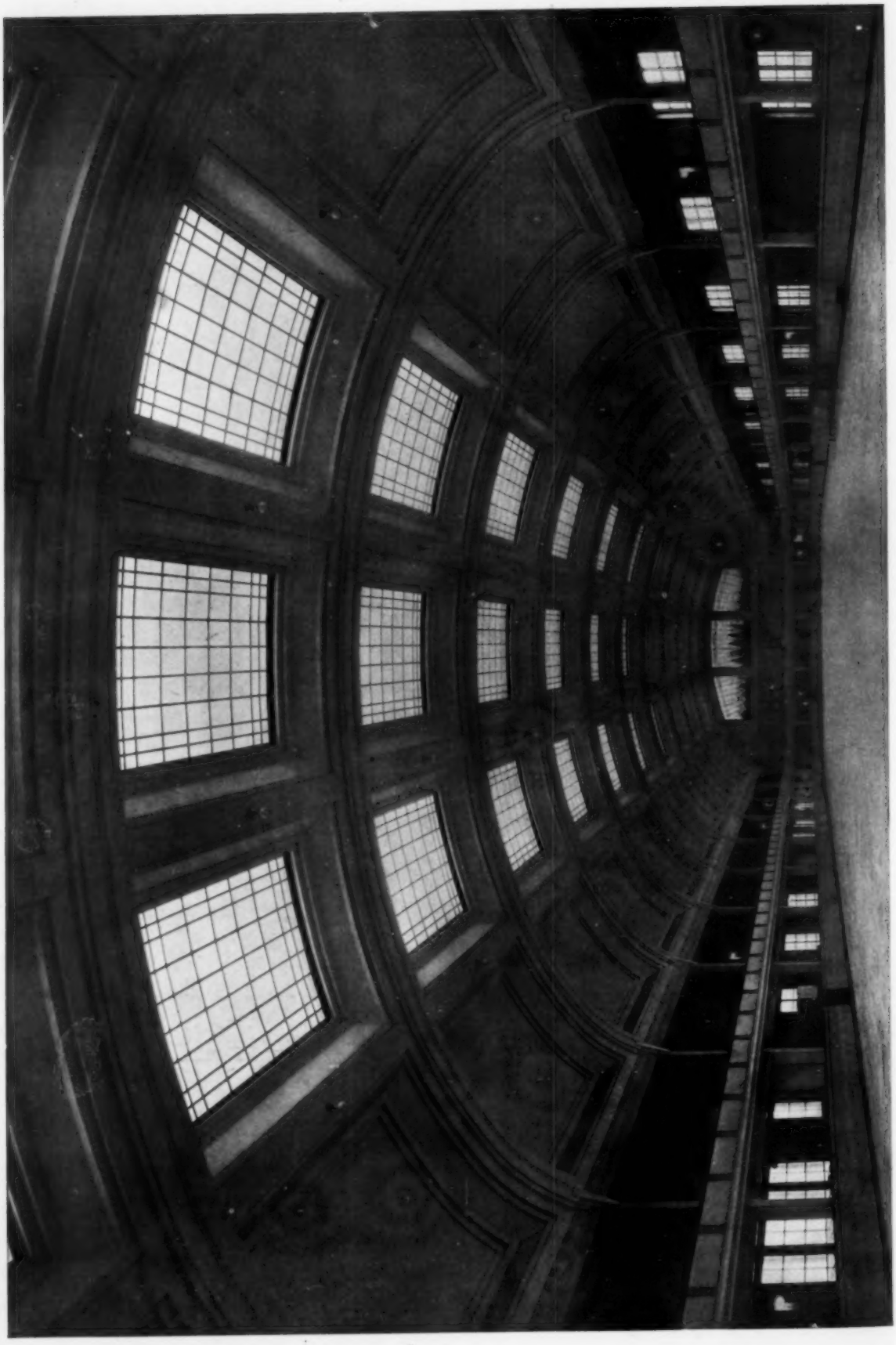
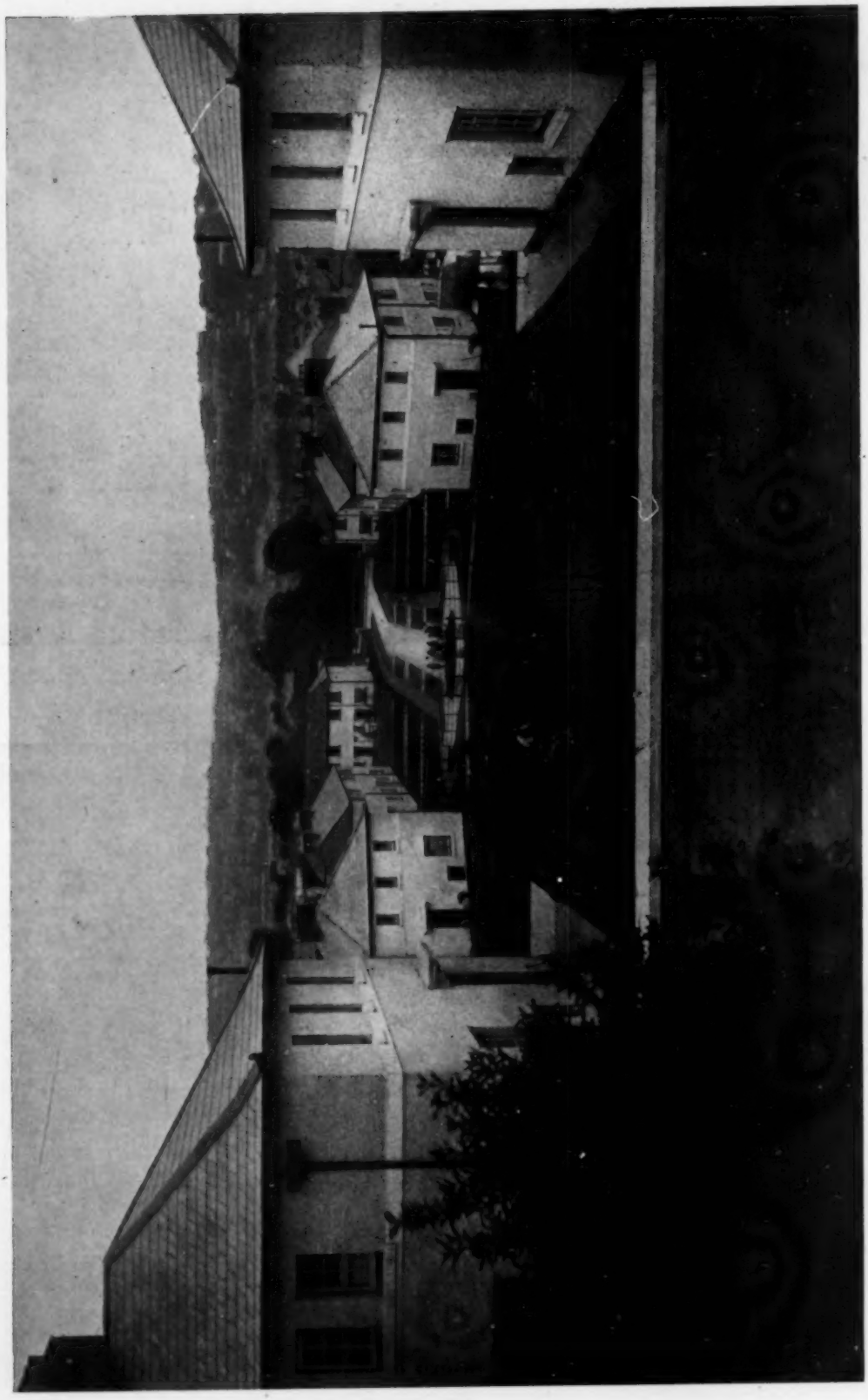


Richmond Skating Rink.
Mr. Byrne Glegg, F.R.I.B.A., Architect.

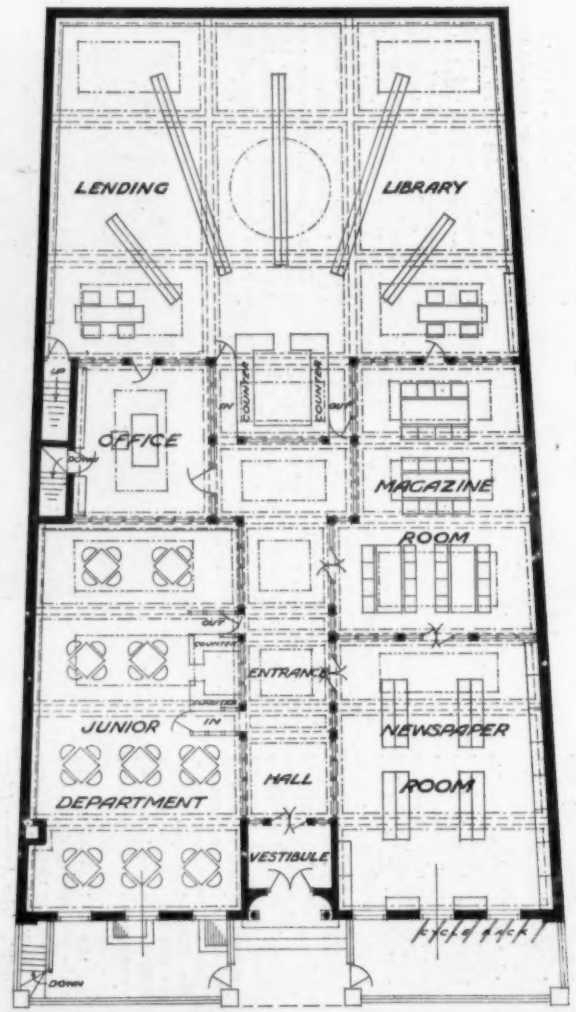
Cottages at Bandon, Co. Cork.

Cottages at Athy, Co. Kildare.

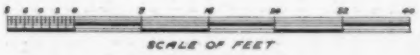
Mr. W. J. Brown, F.R.I.B.A., Architect.

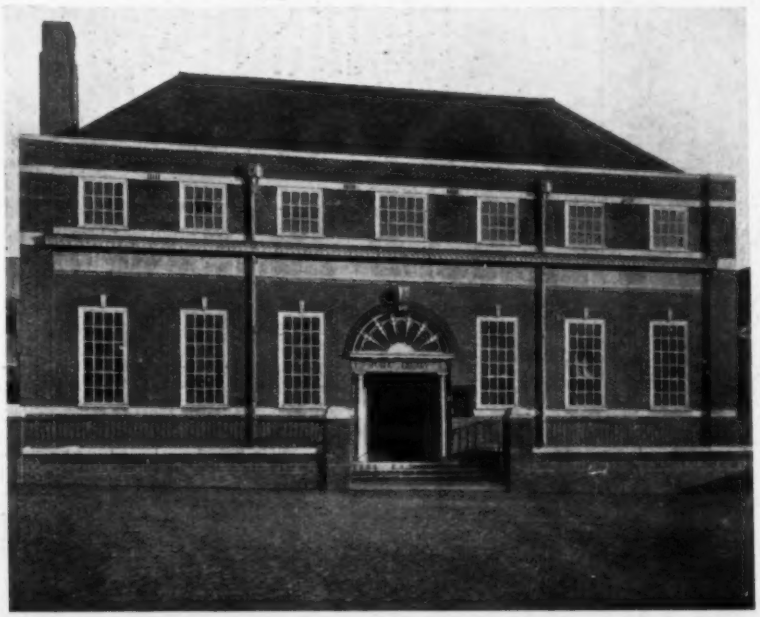


Cottages at Hegarty's Site, Cork.
Mr. W. J. Brown, F.R.I.B.A., Architect.



— CITY OF BIRMINGHAM —
PUBLIC LIBRARY — WARD END





JOHN P. OSBORNE & SON
ARCHITECTS 1929.

Branch Public Library, Ward End, Birmingham.

MESSRS. JOHN P. OSBORNE & SON, Architects.

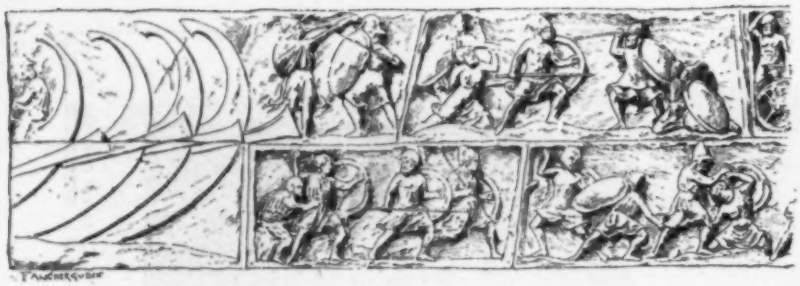


Fig. 1.

MORE GREEK STUDIES

By W. R. LETHABY.

II.—THE MAUSOLEUM SCULPTURE.

The Friezes.

Two long bands of sculpture—the Amazon and Centaur friezes—adorned the building. The former was in earlier restorations supposed to have been the frieze of the entablature, but now that it is recognised that the order was of the friezeless type, another position has to be found. In 1920 I said: "The Amazon frieze may, from its delicacy, be supposed to have formed a band at no great height on the podium running round just above a plinth. Several slabs were found near the line of the building, and Newton wondered that they could have fallen from the great height he supposed and yet be so unbroken and continuous. . . . The Centaur frieze is best assigned to the top of the podium, as Newton suggested, and following the analogy of the Nereid monument." In Niemann's recent restoration of the Nereid monument, based upon a re-examination of the site, he places the two sculptured friezes one over the other at the top of the basement. He had before explored and published the fine tomb at Trysa, also in Lycia, which was enclosed by a boundary wall, of which two, and in some places three, successive courses were sculptured. Krischen adopted the same disposition for the two marble friezes of the Mausoleum.

The doubling of the friezes at the Mausoleum is followed in the new Museum model, and we are told that "for this there is not only the argument from analogy, but also corresponding scale and the resemblance in the mouldings." I doubt both the analogy and the resemblance.

The disposition of two friezes of marble slabs on such a Greek monument as the Mausoleum may hardly be determined by comparing them with the small carvings on the ordinary masonry courses of a boundary wall at Trysa. These reliefs at Trysa were thus described by Professor E. Gardner: "The friezes are simply carved on the wall, in no architectural relation to it or to one another . . . pictorial rather than sculpturesque in character . . . a whole series of friezes often set one above another . . . recalling the sculptured chronicles which adorned the palace walls of oriental monarch." These carved walling courses at Trysa are here called friezes in only a general descriptive sense; they are not friezes proper. The subjects in the different courses are of one kind treated in one way; in some cases the same subject appears in a double register, occasionally the same composition spreads over two courses (Fig. 1).

At the Mausoleum the subjects on the two series of marble slabs are utterly distinct in subject. They are divided by mouldings from one another, and they are dissimilar in character and treatment. The Amazon frieze is a more delicate work than the other, and of such high quality as sculpture that the eastern series at least has been attributed by no less an authority than Michaelis to Scopas. Like the frieze of the Parthenon, it was adorned with many added details of bronze; while the Centaur frieze, so far as may be seen, had few or none. The refined moulding below the Amazon frieze is very different from the rough band below the other. To superimpose two friezes of slabs, filling, together, a height of about 6 ft., would have been very poor construction. Again, it would be very mysterious, if both had been together on the building, why eight or ten times more of the Amazon frieze should survive than of the other. The discoverers wondered that the Amazon frieze, if it had fallen from the great height they supposed, should have been so entire. On the east side, three out of four slabs found, actually joined together. If in fact it were laid down on the podium, and the Centaur frieze were high up, that would perfectly explain the difference. I cannot think that the arrangement together, which has been embodied in an actual restoration set up on the wall of the gallery, will pass into the field of the generally agreed.

Fig. 2.

Several of the slabs of the Amazon frieze, and one of the Centaur frieze, were drawn at Halicarnassus by Dalton in 1749. Although all the figures are restored in his plates, it is probable that some were then in a better condition than when the slabs were brought away. He shows that one of the warriors on the Greek side was bearded, wore a lion's skin, and was armed with a club. He recognised him, as his text shows, for Herakles (Fig. 2). (Compare *Catalogue*, No. 1008.)

In the Museum are many fragments of reliefs of racing chariots, and these have been described as "the Chariot Frieze." Newton and Pullan put them in the cella wall, and the position is generally agreed on. Oldfield spaced them up on the cella wall so that a chariot group showed in each of the intercolumniations. These racing, four-horse chariots, each having an eager driver, were generally alike, with minor variations. There were vertical joints in front of the horses and behind the drivers; each group filled a slab between 6 ft. and 7 ft. long. In 1920 I said: "The Chariot frieze was made up by a succession of very similar racing chariots, spaced at equal intervals. These intervals seem to agree well with the columniations, and we may best suppose that this frieze surrounded the cella in such a way that a group showed in each intercolumniation. This scheme must be considered together with the great chariot on the apex of the pyramid and the general form of the monument. I am drawn to think it possible that when Pliny said that the monument was contracted above like a *Meta* (the goal of a racecourse), he may have reported what had been the symbolic intention of the design. The race [of Mausolus] was run; the great chariot was empty" (*The Builder*).

The Museum restoration seems to me unsatisfactory in setting these racing chariots in separate panels between pilasters, and, further, in interrupting the continuity at the two ends of the cella for the insertion of central doorways. It is more likely, I think, that a continuous row of chariots surrounded the cella racing as around the *Meta* of a circus. If this were the thought, we get an added reason why the pyramid should rise above the cella only. The whole monument would then have been like a *Meta* surrounded by a colonnade. At the apex rested the *empty* chariot of Mausolus, whose racing days were done. The comparison of life to a race is doubtless very ancient, and probably chariot races formed part of the funeral ceremonies of the prince. It should be noticed that the sarcophagus from Clazomene (sixth century) in the Museum has paintings of chariot races and goal pillars.

In my diagram I have shown the Chariot frieze as forming a band on the cella wall, but it is just as probable that it ran along the top of the wall like the frieze at the Parthenon. In Fig. 3 I have restored one of the groups. The sculpture is in very high relief; parts, like some of the horses' legs and the drivers' arms, are entirely undercut. The heads of two of the horses in each group were turned a little out at an angle and free of the ground. Some were turned to look full front, or even backwards. In the restoration there is practically nothing conjectural. The method of drawing restorations on enlarged photographs would carry many questions a stage further, and a few, carefully done, hanging in the Museum would be helpful and enlightening. Fig. 4 is a restored sketch of a second group of horses.

These chariot reliefs are remarkably like those on the two saddle-top Lycian tombs in the Museum and still more like another example of the same type figured in Benndorf and Niemann's *Trysa* (Fig. 42). These are groups of four horses with their legs arranged ex-

Fig. 3.

Fig. 4.

actly and heads turned as in the Mausoleum reliefs. I cannot doubt that these other chariot sculptures were inspired by those of the Mausoleum. These tombs also have protecting lions (fore-quarters only). Those on the Trysa tomb turn their heads like those of the Mausoleum.

In regard to the capital which Adler thought might have belonged to a series of pilasters on the cella wall, it may be mentioned that the fullest record of its discovery was given by Newton from information obtained from Donaldson. After describing the site of the temple of Ares, what is said is this—"Nearer to the Palace of the Pasha are many fragments of shafts and ornaments of a superb Ionic edifice. . . . One of these fragments, the capital of an Ionic column, was found by Mr. Donaldson embedded in the wall of a dwelling and has been engraved in Stuart's *Athens*." (*The Classical Museum*, Part XVI.).

The Great Chariot.

In the Museum restoration the four horses are represented as in movement, but "out of step." The evidence, however, proves that they were standing. This was the view of Newton, and so they are shown in Pullan's restoration. In the Sculpture Catalogue it seems to be recognised that the horses were standing. The body of one in the Museum is set up at a slight angle which suggests movement. It ends, however, in front with a "straight joint" where the forequarters were attached and this joint should be in vertical plane. A mass of such weight in a separate stone could only have been supported by standing firmly on two legs. Turning to the second horse, of which the forepart exists and is set up in the Museum, we find that parts of both front legs in a standing position actually exist. I gave a restored sketch of the constructive scheme of these horses in *The Builder*, September 3, 1920. In Fig. 5 I now give a sketch of the front of this horse: the dotted line suggests the block from which it was cut.

The horses in the model are restored as rather far apart, and even so they do not fill up the wide platform provided at the top of the pyramid for the chariot group. In the Museum is a fragment of the platform itself; in it is a cavity into which is set a horse's hoof about 12 inches from the edge.

Not only are the chariot horses represented against the evidence as moving, but the great statues of Mausolus and his wife are in the chariot, and alongside the horses run two panthers. All these are improbabilities.

The pyramid, as we saw before, was made up of wide and narrow steps. The widest of all, nearly two feet wide, has a sinking on the top about 12 inches across, as if some sculpture or antefix had been set in it. In the model this wide step surrounds the platform on the summit, and on it are placed the panthers. We shall return to the beasts, but it may be said here that it is next to impossible to suppose that they could have been associated with a stationary chariot. The suggested position for the widest step is most unlikely; it counteracts the purpose of the central heightening of the pyramid by hiding the sculpture under its horizon. It seems far more probable that the widest step would be the bottom of all. Such a large platform on the summit is only required on the supposition that the pyramid of steps covered the whole structure; if it was above the cella only the difficulty disappears. It is very unlikely that a stationary chariot would be occupied by the figures of Mausolus and his wife. The statues are not in driving attitudes or costume, but are in graceful poses in ceremonial attire. The lower parts of the figures are very delicate and highly finished, and it is difficult to suppose that they were wrought to be hidden in a chariot some 130 ft. from the ground. The drapery of Artemisia seems to represent silk, and one exquisite foot appears under the skirt. Even the heads of these figures would have been hidden by the horses at any distance less than about a quarter of a mile. The backs of the figures are rather roughly curved as they might have been if they stood in front of a wall.

When I last studied this question (*The Builder*, September 3, 1920) I wrote: "If the figures had been in the chariot an apotheosis would have been suggested, and hence Newton was drawn to think that the female figure was a goddess, a view now given up. On the other hand, an empty chariot might be set up as a memorial. . . . For such reasons I have decided for myself that the great royal figures were not in the chariot but rather in a funerary chamber as will be suggested below." I think now that Newton was partly right as to the apotheosis

Fig. 5.

of Mausolus. But the chariot was empty for he had been taken to be with the gods. The stepped pyramid was a "high place" appropriate for removal to another sphere represented by the cella.

In the article published in the *Times* it is said of the chariot: "We follow most recent authorities in restoring the statues of Mausolus and Artemisia as standing in it." This I believe to be a mistake in regard to recorded testimony. As long ago as 1865 Stark pointed out that Mausolus was vested as a philosopher, and suggested that he was rather in a chamber or cella. The question was argued at length in the *Hellenic Journal*, 1910, by Mr. Preedy, who concluded that the two great figures were not in the chariot. Dr. Percy Gardner, in his *New Chapters in Greek Art*, 1926, writes: "There are very strong reasons for holding that the figures of Mausolus and his wife, which Murray placed in the chariot of Pythius, did not stand there. . . . Pythius, who was noted as an architect, but not as a sculptor, seems merely to have executed the chariot and horses; we must not attribute to him the magnificent figures." (See also *J.H.S.*, Vol. XIII.).

M. Charles Picard, formerly director of the French School of Archæology in Athens, and the author of a recent history of Greek Sculpture published in 1926, says: "In the interior of the temple tomb it seems that a sculptor otherwise unknown set up two great statues of Mausolus and Artemisia. On the platform of the pyramid Pythios had disposed an empty chariot. Students have ceased to put the pair of portrait statues in the Quadriga."

If these great statues were in the chariot its floor must have been at a proper level, and any thickening, together with additional support, must have been underneath; indeed between the wheels it must have been practically solid. No notice is taken of this necessity in the model.

Besides the statues of Mausolus and Artemisia, important fragments of several other portrait-like figures, and statues of gods were found.

A torso of a large seated figure, about twice the scale of life, in a purple painted robe and having one foot on a footstool, is most generally recognised as Zeus. Parts of another large figure which were found were the head (certainly) and shoulder (possibly) of Apollo. Professor Percy Gardner has shown that this Apollo was harping. It was a very fine work, Scopaic in character. The head, in superior material, was let into the body. The heads of Mausolus and his wife were wrought in the same way, and this is an additional proof of their not having been 140 ft. above the ground. There are also three female heads, of large scale. One of these, which seems larger even than that of Apollo, may very well have been that of Hera, the wife of Zeus. The coins of Halicarnassus, and a relief which will be mentioned, show that Zeus was specially worshipped by Mausolus and his family.

If Zeus, Hera and Apollo were in some group of the gods, we might expect that Artemis, the name goddess of Artemisia, would be here also. Such an assembly of the gods would have, it may hardly be doubted, occupied the Cella of the great structure. Of the Zeus, it is observed in the *Catalogue* that "at the back the drapery is slightly done . . . it may be inferred that the figure was placed so as not to be seen from behind." The great statues of Mausolus and Artemisia have their backs treated in a similar way, and it is probable that they would have been in the Cella in the presence of the gods. As I wrote in 1920: "In such a chamber there would have been a group of gods at one end—Zeus in the midst, as if rising in welcome and accepting offerings, while Apollo played the harp. Against the other wall I place Mausolus and Artemisia, Idrieus and Ada [brother and sister of Mausolus], and others, as if making offerings." One of the portrait statues was a bearded male of a very handsome type, who looks "every inch" a prince. "It probably represents some ancestor of Mausolus or other local hero" (*Catalogue*). The figures were fully draped, and stood in easy poses; one had his right leg bent, passing in front of the left, which bore the weight; probably he rested on a stick and had his left hand against his hip, in an attitude often found in sculpture.

Such an assembly of gods and men in a mysterious tomb's chamber would have given some adequate meaning to the whole structure. Fragments of a portrait statue found at the Nereid monument suggest that there,

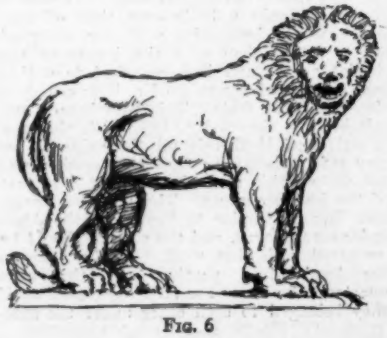


Fig. 6

400, a cella was occupied in a similar way. I also have a note that a statue of Philip II of Macedon was placed in a chamber of his tomb.

A little relief found at Tegea and acquired by the Museum in 1914 shows Idrieus and Ada, the brother and sister of Mausolus, worshipping Zeus. They have their forearms lifted in adoration. This is how I would restore the left arms of the great statues; their right hands probably drooped holding offerings. This relief is an important document, the figure of Ada is draped like the statue of Artemisia of the Mausoleum, and looks like a tiny echo of it. On the label at the Museum is written: "The relief may be supposed to have been dedicated about 345 B.C. by a Greek craftsman of the Mausoleum on his return to Greece. . . . Ada makes gesture of adoration."

It may be remarked that Scopas, the great sculptor, who is said to have worked at the Mausoleum, had earlier been the master at the Temple of Tegea. I do not feel much assurance in regard to the story that four eminent sculptors worked on the several sides of the Mausoleum; it looks like a myth. Again, it should be noticed that the heads of Hera (?) and other female statues are very like a head found at Priene, where Pythios, the architect, worked, and it seems as if sculptors went with him there from Halicarnassus. The face of the great statue of Artemisia is broken away, but it might be adequately restored (on paper) by comparison with these other heads. A large restored photograph of the two great portrait figures would be a boon.

If the sinking in the 24 in. step before mentioned was not for a panther, it was probably prepared for some other sculpture or antefix. I would suggest that there were such additional adornments on the bottom step of the pyramid, where several restorers have placed sculptures of some kind.

Animals.

Besides the statues already mentioned there were groups of mounted huntsmen, with some other figures of similar type, probably on foot, and many animals, wild and domestic. I think that these are best disposed as large hunting and sacrificial compositions along the external flanks of the monument, much as Adler has proposed. He, however, placed large mounted figures separately at the angles of the building, and for this there is no evidence. The two panthers, which in the new model have been placed on high with the chariot, more probably belonged to one of these groups which are not dealt with in that restoration. In the descriptive article it is said: "Alongside the chariot we set the panthers. The evidence for this is that a hoof [paw?] is preserved attached to what can be shown to have been a part of the top step." If the evidence is absolutely certain that the wide step was the top one, and that a panther's paw was attached to a part of the top step of the pyramid, of course it must be accepted, but short of clear demonstration I must doubt. A panther's paw, which may be the one in question, has recently been brought out and placed on the wide step, which, as already said, may not be the top one, but rather the bottom one. The paw is of a scale only a little over that of life, which would harmonise with the mounted hunter rather than with the horses of the chariot group, and it is attached to a thin base like the fragments of a boar which is also of similar scale. This thin base is not suitable for the cavity, by which the paw is put, and if this is all the evidence we may safely determine that the panther was not set on this stone but that it was part of the hunting group. The mounted huntsman is very similar to figures on the Alexander sarcophagus, and the subject should be compared with that work. In the Museum the head of a panther and the back quarters of a boar are still associated as if they belonged to each other under the numbers 1095 and 1095*. I gave a restoration of the boar in 1920.

In the new restoration the large number of similar big lions have been "set in pairs to guard the doors of the sepulchral chambers." That is on either side in the supposed great central chamber of the basement. It seems more probable from the positions where they were found that the lions were high up on the structure. The analogy with the Nereid monument suggests that there would have been some sculptures in the intercolumniations of the superstructure. The size of these lions, with their tails brought well under their bodies, appears suitable for filling the spaces between the columns, and this I still think is the most likely position for them. Krischen puts them in the intercolumniations, but end on rather than sideways. I think the latter the more probable, as the beasts turn their heads in a *passant gardant* manner. The most complete of the lions at the Museum stands on a pedestal 4 ft. 10 in. long, and this is just exactly the size that would fill the intercolumnar space. Newton thought that parts of about twenty lions were found and that there had been more. The restoration, Fig. 6, suggests how suitable they were for filling the space between columns.

I pointed out before that some small sculptured panels which Dr. Murry suggested might have filled the panels of the lacunaria are not likely to have occupied such a position, as they have margins of unequal width. The new restoration of the Museum omits them; they must have been placed in a vertical position. A small fragment of what appeared to have been the central stone of a plain coffer was recently placed in the gallery but has disappeared again.

MODERN ENGLISH ARCHITECTURE

In our last issue we gave a report of Professor Richardson's recent lecture on "Modern English Architecture" before the Royal Society of Arts. At the conclusion of this address the lecturer read an imaginary paper as it might be given before the Society in the year 2029. This was as follows:—

Friends of the Arts.

The bitter invective which accompanied the development of architecture a century ago is not a little astounding. In those days public opinion was not alive to the good buildings which were erecting. To-day we view the best buildings of the reign of King George V in a very favourable light. In spite of the apathy of the public and the lesser municipal authorities, English architects at that time had the sense to follow time-honoured proportions; hence the mellowed and charming buildings which have come down to us as examples of skill and good taste. It is owing to these outstanding masterpieces that our present method of designing in 2,029 has reached a high standard. When we think of the difficulties, when we consider that architectural education was then in its infancy, when we realise that the age was one of transition from exploiting period styles to a realisation of fine building, we are astonished at the reticent manner of the old architects of 1929.

It was not until 1950 that the famous Act was passed which prohibited the building of bungalows and small villas on the great trunk roads. The clearance of the ruins of these crude cabins is in some districts still in hand. About this time municipal authorities in every large city adopted measures to ensure comprehensive designs for street architecture. Old buildings of historical character were scheduled and preserved by Government, all the slums were cleared, and regulations were framed zoning the trades and factories. Old London, which during the centuries had grown from a walled city to a chaotic sprawl, was placed under the control of a central body. The old parochial and ward administration yielded to organisation on the grand scale. London then extended for thirty miles in all directions. Legislation, however, decreed that land speculation beyond this point should cease. The new laws for the revival of agriculture came into being. At this time electrical power was fully developed at the pithead and the hideous grid system of 1930 was replaced by underground conduits. The motor roads which in 1945 were constructed between London, the ports and the manufacturing centres, attracted the unwieldy lorries and curious motor-cars from the congeries of mediæval roads, thus saving the countryside. These great avenues, planted with fruit trees, are now the most pleasant walks in the world. You can trace their direct course when travelling about from any of the airports. More instructive are the old railroads with their fine viaducts and splendid embankments. The electric locomotives which haul the heavy goods traffic to-day perpetuate the memory of the canalisation of England two centuries ago. All these improvements have had a beneficial effect on the national architecture. We know what it is to enjoy life in town in these days. We shop in comfort at the roof level and we can use the pavements freely. The moving ways are seldom at rest. There is little noise save the voices of the people. The old city with its narrow alleyways has long been closed to wheeled traffic. Life in London to-day is quiet and pleasant. The river is gay with pleasure craft from Oxford to the Nore. Since all the factories were removed to Essex the smoke nuisance has been entirely eliminated; rarely do we get more than a slight sea mist in town.

The increase in the number of dairy farms thirty miles from Charing Cross is a further sign of the national well being. England is now largely self-supporting in food production. The ancient markets of London—Covent Garden, Leadenhall and Smithfield were decentralised long since. In course of time it is hoped that the new circular avenue Lutyens which is nearing completion will create residential centres on the site of the ancient Victorian suburbs.

To-day we have commercial buildings of simple character which are in marked contrast with the older buildings of the city. People have learnt to inspect goods within the bazaars and to do their lounging on the elevated terraces. Who among the public would dream of patronising a store when all the goods were heaped in vulgar display behind a sheet of plate glass? We have reached a stage of culture which controls the external appearance of our streets. The Neo-Georgians tried to reface London with Portland stone. We have adopted a veneer of marble for our brick and concrete besides inventing a surface which forms part of the concrete itself. We still employ brickwork and baked clays, and shall continue to do so, but we have become accustomed to colour our materials. We have invented black enamelled bricks, similar to those employed at Brighton in the 19th century. This concrete was found to be unsuited to this climate, as were the long low windows which came into use about 1940. It was found that rooms which were all glass were too cold in winter, although electric heating was cheap.

In this age, when it would be thought criminal for any member of the community to be lacking in good taste, it is interesting to know that our ancestors were among the untidy peoples of the then civilised world. After one of their public Bank Holidays the lorries used to go round collecting tons of waste paper from the parks. London life was very different then. We have indeed advanced in our conveniences.

People are healthier to-day and live to a ripe old age. England can house and feed her fifty millions with ease. She has preserved her antique charm and the best of her old works She is renowned for her architecture and her schools.

The emigration of whole districts to Canada, Australia and South Africa in 1910 was one of the wisest moves of that period. Looking back on the year 1929, the close of the first post Great War period, we discern the beginning of the movement which raised democracy to an appreciation of the spiritual side of existence. Nothing dies, there is only change. We have no desire to probe the mysteries of the inscrutable future, but we know most certainly that in due course the order which has come about for our enjoyment will be improved, and that generations yet unborn will look back upon this epoch of 2029 as we view the buried past.

SOCIETIES AND INSTITUTIONS

R.I.B.A.

The Status of Salaried Architects.

The Council of the R.I.B.A. have recently appointed a Committee with the general object of reporting from time to time on all matters affecting the interests of members who occupy salaried positions. A meeting of salaried members was held at the R.I.B.A. on March 22, with the object of explaining the intentions of the Committee and the methods by which it is hoped to realise these intentions. The meeting was well attended, and a number of useful suggestions were put forward.

The Hon. Secretary of the Committee said the response to the recent letter addressed by the Committee to all members of the Institute had not been so big as they had expected. The reason was probably that members were rather suspicious of what was undoubtedly a new departure. The meeting were acquainted with the history of the movement which led up to the appointment of the Committee, and an appeal was made for co-operation. It was emphasised that the scope of the Committee's usefulness would be very limited unless they received the information for which they had asked.

It is stated that the Institution of Professional Civil Servants have signified their intention of acting in close co-operation with the Committee, and if all salaried members will realise that the Committee exists solely to help them, and will act accordingly, much good will be achieved.

Following are notes from the Minutes of the Council of March 4 :—

The King's Illness.—The following telegram was submitted to the Council :—

Craigweil House, Bognor.

The President,
Royal Institute of British Architects.

The Queen sincerely thanks you and all who joined in the kind message you have sent to Her Majesty.

Private Secretary.

London Squares.—The Town Planning and Housing Committee drew attention to the fact that no determined action has been taken by Parliament to carry out the recommendations of the Royal Commission which was appointed to consider the question of the preservation of the London Squares and Enclosures. Since the publication of the Royal Commission's Report in 1928, building operations have begun on Trafalgar-square, Chelsea, an open space of 2.71 acres situated in a densely populated district. In view of the possibility that other open spaces in London may be built on in the near future, the Council, on the recommendation of the Town Planning Committee, have written to the L.C.C and the Greater London Regional Planning Committee, urging these bodies to use their influence towards the promotion of legislation at an early date to give effect to the recommendations of the Royal Commission.

Memorial to the late Sir Ebenezer Howard.—The Council have made a donation of £5 5s. towards the fund for a memorial to the late Sir Ebenezer Howard.

World Engineering Congress, Tokio: British Committee.—Dr. Raymond Unwin, F.R.I.B.A., has been appointed to represent the R.I.B.A. on this Committee.

British Engineering Standards Association: Conference on Commercial Plywood.—Mr. Francis Hooper, F.R.I.B.A., has been appointed to represent the R.I.B.A. on this Conference.

Panels for the Distribution of Speculative Housing Work.—The Council have appointed a committee to consider, in conjunction with the C.P.R.E., a scheme for setting up panels of architects in connection with speculative housing work.

R.I.B.A. Sessional Papers.—It has been decided, on the recommendation of the Art and Science Standing Committees, to publish abstracts of sessional papers in advance. It is hoped, by this method, to increase the interest of members in R.I.B.A. general meetings at which papers are read.

Irregular Architectural Competitions.—In order to avoid the possibility of circumvention of the Institute veto in the case of an irregular competition it has been decided, on the recommendation of the Competitions Committee, to amplify Clause 7 of the Code of Professional Practice as follows :—

> 7. An architect should not take any part in a competition as to which the preliminary warning of the Royal Institute has been issued, and must not take any part in a competition as to which the Council of the Royal Institute shall have declared by a resolution published in the Journal of the Royal Institute that members must not take part because the conditions are not in accordance with the published regulations of the Royal Institute for Architectural Competitions, *nor must he be associated in any way with the carrying out of a design selected as the result of a competition as to which the Council shall have declared by a resolution published in the Journal that members must not take part.* (The additional words are italicised.)

Rebate in Respect of Students' Contributions.—It has been decided, on the recommendation of the Allied Societies' Conference and with the concurrence of the Finance and House Committee to recommend the general body to amend by-law 85 so as to enable a rebate of one-third of the contributions of students R.I.B.A. to be made to the Allied Societies in the case of those students who are members of allied societies.

The late Mr. J. K. Hunter, L.R.I.B.A.—The President referred to the loss which the Institute and the Council had sustained by the death of Mr. J. K. Hunter, a member of the Council and Past-President of the Glasgow Institute of Architects, and on his proposition the Council passed a resolution of sympathy with the relatives of the late Mr. Hunter.

The Fellowship.—The Council, by a unanimous vote, elected Mr. R. Jackson (Madras, India) to the Fellowship under the powers defined in the Supplemental Charter of 1925.

Membership.—Election March 18.—Nominations for membership were approved as follows :—As Hon. Associate, one application; as Hon. Corresponding Member, one application; as Fellows, ten applications; as Associates, 40 applications.

Retired Fellowship.—Mr. Frank Walter Mee, Fellow, 1896, was transferred to the retired Fellowship.

Resignations.—The following resignations were accepted with regret :—H. S. Besant, A.R.I.B.A., S. W. W. Delves, A.R.I.B.A., F. E. Littler, A.R.I.B.A., J. St. John Phillips, A.R.I.B.A., W. H. Stanbury, A.R.I.B.A., S. P. Brinson, L.R.I.B.A., A. Hall, L.R.I.B.A., H. V. R. Schofield, L.R.I.B.A., J. B. L. Tolhurst, L.R.I.B.A., E. R. Walker, L.R.I.B.A.

Application for Election as Licentiate under Section III. (f) of the Supplemental Charter of 1925.—One application was approved.

Studentship.—The following probationers were elected as students of the R.I.B.A. :—C. S. Bevan (A.A.), H. S. M. Carver (A.A.), G. A. Cassels (Edinburgh College of Art), W. J. P. Cox (Northern Polytechnic), J. B. Iles (University of Cambridge), H. Jackson (Birmingham School of Architecture), A. R. Mackness (Royal West of England Academy, Bristol), J. B. Moffat (Edinburgh College of Art), N. A. G. Neil (Edinburgh College of Art), H. F. Rea (University of London), R. D. Scott (A.A.), Patricia B. Webster (University of London).

Debate between Architects and Specialists.

On Tuesday, April 23, at 5.30 p.m., a debate will be held at the R.I.B.A., 9, Conduit-street, W.1, on the subject of "Organisation." The principal speakers will be Mr. Maurice E. Webb, D.S.O., M.C., F.R.I.B.A., and Mr. Matthew Hill, of Messrs. Higgs & Hill.

GLOUCESTERSHIRE ARCHITECTURAL ASSOCIATION.

A general meeting of this Association was held at the Bell Hotel, Gloucester, on Wednesday, March 20, when Mr. W. E. Watson, F.R.I.B.A., barrister-at-law, spoke on "Legal Liabilities of Architects and Contractors." A discussion ensued, in which many members took part, and a hearty vote of thanks to the lecturer was carried unanimously.

SOUTH WALES INSTITUTE OF ARCHITECTS.

The annual meeting of this Institute was held recently at 5, High-street, Cardiff, Mr. C. S. Thomas in the chair. The officers for the ensuing year were elected as follows :—President, Mr. T. Alwyn Lloyd (Cardiff); vice-presidents, Mr. C. S. Thomas and Mr. J. Herbert Jones (Swansea); hon. treasurer, Mr. H. Teather; hon. auditor, Col. E. H. Fawckner; hon. librarian, Mr. R. H. Winder; hon. secretary, Mr. Ivor P. Jones.

Members of the Council.—Central Branch : Messrs. H. N. Edwards, W. S. Purchon, J. Williamson, Percy Thomas, F. H. Heaven, J. Llewellin Smith, T. Edgar Smith, A. G. Lynham, C. F. Jones, J. B. Fletcher, and W. D. Thomas. Western Branch : Messrs. C. Russell Peacock, G. R. H. Rogers, O. S. Portsmouth, S. R. Crocker, Edwin Smith, and D. F. Ingleton. Eastern Branch : Messrs. Walter Rosser, E. H. Fawckner, C. E. Tebbs, C. E. Compton, and Charles F. Ward.

Associates' and Students' Representatives.—Central Branch : Messrs. A. J. Hayes, J. R. Hallett, A. G. Fletcher, and C. H. Evans. Western Branch : C. E. Geddes. Eastern Branch : Mr. J. Edward Lenton.

[Mr. T. Alwyn Lloyd, F.R.I.B.A., M.T.P.I., was educated at Liverpool College. He received his training at the School of Architecture, Liverpool University, and after spending the next few years in that city, from 1907 to 1912, he assisted Dr. Raymond Unwin in the development of the Hampstead Garden Suburb, before settling in Cardiff, when he was appointed architect to the Welsh Town Planning and Housing Trust, Ltd., for whom he has carried out a number of important schemes.]

The annual dinner of this Institute was held on Friday, March 22, at the Park Hotel, Cardiff, when Mr. C. S. Thomas, F.R.I.B.A. (Swansea), the retiring president, presided over a representative gathering. Among the guests were the Deputy Lord Mayor and Lady Mayoress of Cardiff (Alderman C. F. Sanders, J.P.), and Messrs. Walter Tapper, A.R.A., P.R.I.B.A., Ian MacAlister (Secretary, R.I.B.A.), E. C. Bewlay (President, Birmingham A.A.), David Davies, A.I.O.B. (President, South Wales Federation of Build-

ing Trades' Employers), J. S. Richards (President, Cardiff Master Builders' Association), John B. Dawson (Secretary, Swansea Master Builders' Association), Robert J. Webber, J.P., Principal Charles Coles, B.Sc., V. E. Nash-Williams, J. Ray Gibbon, Garnet Hartley (Newport), T. Kirby (Newport), and F. H. Weaver (Chairman, Swansea Master Builders' Association), T. Alwyn Lloyd (President-elect of the Institute), Ivor Jones, Percy Thomas, Harry Teather, J. Llewelin Smith, J. Herbert Jones, O. S. Portsmouth, J. H. Rogers, C. Crocker, J. Williamson, W. S. Purchon, E. H. Fawckner, H. Norman Edwards, D. Pugh Jones, C. F. Ward, W. Gibson, F. J. Thomas, and E. Cross.

Principal Charles Coles, B.Sc., proposing the toast of "The R.I.B.A. and the Allied Societies," referred to the full recognition which the Welsh School of Architecture had recently received, and expressed the thanks of the Technical College and the locality generally for the great interest which the R.I.B.A. had always shown in the school. He paid a special tribute to Mr. W. S. Purchon, to whose hard work and enthusiasm the present flourishing condition of the school was, he said, largely due.

Mr. Walter Tapper, A.R.A., responding, referred to the large number of centres which he had visited during his term of office, and the pleasure which it gave him to renew his friendships at Cardiff. He hoped that architects would never lose faith in their calling, and, in spite of very difficult times through which they in South Wales had been passing, that they would maintain their courage and vision.

Mr. E. C. Bewlay, F.R.I.B.A., President of the Birmingham Architectural Association, replied on behalf of the Allied Societies and spoke of the fine spirit of co-operation between them and the Royal Institute.

Mr. C. S. Thomas, F.R.I.B.A., in submitting the toast of "The Guests," thanked the Cardiff City Council for their initiation and support of the School of Architecture.

Alderman C. F. Sanders, Deputy Lord Mayor of Cardiff, in his reply, stated that although he was the chairman of the "Economy Committee," his desire was to do nothing which would diminish the efficiency of the School of Architecture, which he hoped would grow to be an even more influential body in the future. He spoke of the great changes and improvements which had taken place in Cardiff during his lifetime, for which architects, both from the locality and from outside, were largely responsible. They were all proud of their city and its fine setting and surroundings, in addition to the public buildings which were so well known.

Mr. David Davies (Swansea), President of the South Wales Federation of Building Trades Employers, also responded, and at the conclusion of the proceedings, on the proposition of Mr. T. Alwyn Lloyd, a hearty vote of thanks to the chairman was passed for his services as President during the last two years.

DEVON AND CORNWALL ARCHITECTURAL SOCIETY.

The annual meeting of this Society was held on Saturday, March 23, at Deller's Café, High-street, Exeter. The chair was taken by the President, Mr. R. M. Challice, J.P., of Exeter, the other members present being:—The Exeter Branch: Messrs. J. Bennett, E. Kemeys Jenkin, A. H. Ough, W. R. F. Ham, B. H. Palmer, Philip Tilden, W. J. M. Thomasson, L. F. Tonar, D. W. Cooper, H. W. Merrifield, H. D. Wheater, and J. Challice (hon. secretary). The Plymouth Branch: Messrs. Chas. Cheverton, A. C. Morman, A. S. Parker, H. V. Prigg, B. Priestley Shires, W. A. Vercoe, W. W. Wood, and A. T. Martindale; honorary members, R. H. Parker and E. L. R. Vining.

The annual report and balance sheet of the Society were presented and unanimously adopted. Arising out of the report the President drew attention to the fact that the Society is an annual subscriber to the Architects' Benevolent Fund, the Royal Institute of British Architects' Educational Fund, and to the Wren Society. It was resolved that in addition an annual subscription of two guineas should be given to the Society for the Protection of Ancient Buildings. The President referred to the valued services of Mr. B. Priestley Shires, both to the Society and to the Royal Institute, and expressed the hope that recognition would be forthcoming after more than 50 years of untiring work for these bodies. The annual report and balance-sheets of the branches were presented and adopted.

The prize for the annual competition of measured drawings was awarded to Mr. P. J. T. Carter, of Plymouth, who was warmly congratulated. It was decided that a list of buildings suitable for measurement for this competition should be prepared as a guide to students.

Mr. R. M. Challice, the retiring president, then delivered his address, at the close of which a hearty vote of thanks was accorded him for his valuable work for the Society during his year of office.

The following officers and members of Council were elected for the ensuing year:—President, W. A. Vercoe, A.R.I.B.A. (Plymouth); vice-presidents, J. Bennett, L.R.I.B.A. (Exeter), W. H. May, F.R.I.B.A. (Plymouth); past president, R. M. Challice (Exeter); hon. treasurer, S. Dobell (Exeter); hon. auditor, L. F. Tonar, L.R.I.B.A. (Exeter); hon. secretary, J. Challice, A.R.I.B.A. (Exeter). Members of Council:—Exeter Branch: E. Kemeys Jenkin, F.R.I.B.A. (Exeter); J. C. Beare, A.R.I.B.A. (Newton Abbot); W. J. M. Thomasson, A.R.I.B.A. (Exeter); A. H. Ough, F.R.I.B.A. (Dawlish); W. F. R. Ham (Exeter). Plymouth Branch: A. S. Parker, F.R.I.B.A. (Plymouth); B. Priestley Shires, F.R.I.B.A. (Plymouth); C. Cheverton, F.R.I.B.A. (Plymouth); H. Victor Prigg, A.M.I.C.E. (Plymouth); J. Leighton Fouracre, F.R.I.B.A. (Plymouth). Associate Members of Council:—Exeter Branch: D. W. Cooper (Exeter); H. A. Peters, A.R.I.B.A. (Exeter). Plymouth Branch: A. T. Martindale, L.R.I.B.A. (Plymouth).

Following the business of the meeting, Mr. R. H. Parker, principal of the Central School of Arts and Crafts, Plymouth, gave an account of the progress of the architectural department of the school, and mentioned that the Plymouth Education Authority appreciated the action of that society in appointing a visiting committee. He expressed the hope that in the near future students would be able to sit at Plymouth or Exeter for the examinations of the R.I.B.A.

CENTRAL SCHOOL OF ARTS AND CRAFTS.

Sir Banister Fletcher, F.S.A., F.R.I.B.A., lecturing at the Central School of Arts and Crafts recently, described the domestic architecture of the Georgian period in England. The houses, both large and small, he said, were evidences of the social progress of the period, and during the eighteenth century large numbers were built both for the middle classes and for the aristocracy. The planning of the houses was much developed from the Early Renaissance types, for the quadrangle type had disappeared; and the square block, which was developed late in the seventeenth century, now held sway. In many of these the Wren tradition was carried on, and most country towns still retained examples of the period, frequently occupied nowadays by local professional men. Contrasting with these quiet, homely houses were the pretentious mansions of the artistocracy, in which pediment and portico were almost invariably introduced—hence the nickname "pediment and portico style." Many additions were made to the simple block plan in the form of side wings and curving colonnades and terraces, a great variety of forms being produced by this means. Castle Howard, Blenheim Palace, Oxfordshire, by Vanbrugh, Kedleston, Holkham, and others were good examples of the larger type of mansion.

SOUTH BUCKS REGIONAL PLANNING

Architects and builders will find much of interest in Mr. W. R. Davidge's report on the South Buckinghamshire and Thames-side region. A Regional Advisory Committee was formed for this district on January 14, 1927, for the purpose of preserving the existing amenities and planning the future development of one of the most beautiful and picturesque parts of England. With a view to furthering this purpose and the adoption of a common basis of action, twelve local authorities in South Buckinghamshire combined with three local authorities on the Berkshire side of the Thames, and placed representatives upon the committee with a technical sub-committee consisting of all the surveyors to the authorities in the region. Mr. W. R. Davidge, F.R.I.B.A., was appointed on March 18, 1927, as their town-planning consultant. His report is a mine of valuable information. It will be a surprise to many, for example, to learn that the upper reaches of the Thames form a natural highway for commercial traffic.

But those who are anxious to see the existing character of the countryside protected will naturally turn to the section of the report concerned with the reservation of open spaces. It is satisfactory to know that the proposals made on this question have been accepted by the Thames Valley Branch of the Council for the Preservation of Rural England. It is recommended that there should be regional open space reservations on the Thames-side, in the valleys of the Colne, the Misbourne and the Chess, and also on the Chiltern Hills.

Special attention is paid to the important question of encouraging suitable designs for new buildings, and choosing local materials which are true to the tradition of the district. Existing examples of manor house or cottage architecture, surviving from the various phases of earlier development, provide a harmonious key to the general pattern of the development to come. It is recognised, however, that it is often lack of disposition, rather than lack of finance, that in many cases retards the present-day construction of buildings broadly following the pattern of the charming little farmhouses and cottages that are typical of this part of England. "On analysis," states Mr. Davidge, "it is found that the three outstanding factors, other than industry, that disturb the visual effect of the landscape are discordant colourings of building materials, unrelated scale, unbroken symmetry, or monotonous repetition." Bearing these facts in mind, it is suggested that it will be possible for local authorities to prevent such building as might conceivably deface the pleasant character of a district. Furthermore, it is urged that the possibilities of restoring old buildings and of adapting them to more modern requirements should always be most carefully considered before demolition is permitted. The purpose of the Housing (Rural Workers) Act, 1926, is to enable financial assistance to be given by the Government, and by the County and District Councils, towards the cost of the structural repair of such buildings.

Another interesting point raised in the report is that of street furnishings. It is worth taking considerable trouble to ensure that such apparently small details as street signs, street lamps, telephone boxes, and even telegraph poles should be pleasing in effect. As they are always very apparent units in the general scene, they should be suitable to the position in which they are placed. Advertisements, too, need to be controlled, states Mr. Davidge. Attention is drawn to the rapid growth of advertisements along such roads as the Bath Road and the increasing use of "sunlight signs."

Mr. Davidge has performed a great service to a district that is particularly fortunate in the variety of its attractions both to resident and visitor. His survey and report should certainly be the foundation of a definite regional policy

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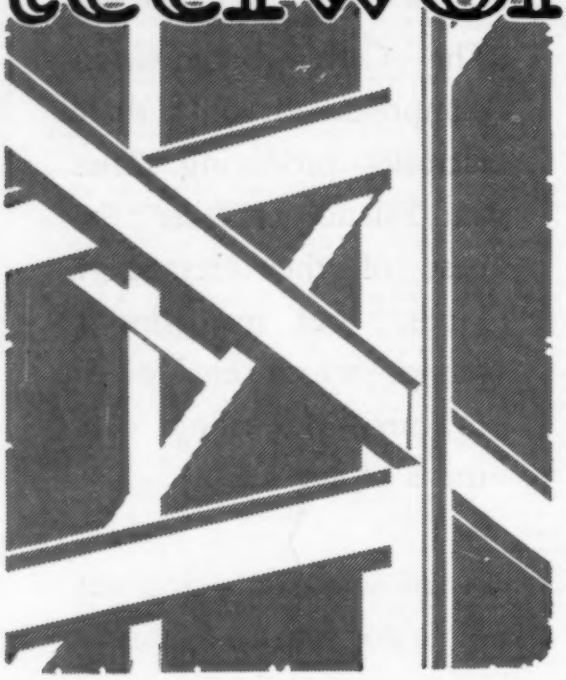

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CHANGING LONDON

PAPERS on this subject were read recently before the Auctioneers' and Estate Agents' Institute of the United Kingdom at 29, Lincoln's Inn Fields, W.C.2, by Messrs. J. Geo. Head and J. Seagram Richardson. In the course of his paper Mr. Head said that he would limit the review to the happenings of just over a quarter of a century in the West End. The most spectacular instance was, of course, that of Regent-street. Haymarket and Cockspur-street were even now in the throes of a similar drastic rebuilding, while Piccadilly, St. James's-street and Pall Mall had already experienced the erection of palatial structures which marked a stage in the same progress. Oxford-street was being transformed by the replacement of the small 3-story houses by the stately buildings in which modern Commerce delighted to house herself. The original type might still be seen between Orchard-street and Edgware-road, but they were now being pulled down to be replaced by more imposing buildings.

Park-lane showed a change indeed. That thoroughfare, till recently occupied by individual residences of the artistocratic or wealthy, now displayed towering blocks of flats on the site of the famous Grosvenor House. The fine old Italian Renaissance palace of Dorchester House has been "disposed of as an unrestricted building site"—ominous phrase. It was boldly stated that Park-lane was destined to become the Rue de Rivoli of London.

Returning northwards, we found that the residential area of Portman-square had been invaded: the whole of the eastern and part of the southern sides had been rebuilt and now presented handsome shops surmounted by luxury flats. The fine old Georgian houses of York-place had been turned into shops, and when we reached the great east and west artery of Marylebone-road we found a veritable transformation in progress. The little old houses, with their long front gardens, were gone. On the south there was Bickenhall-Mansions and the new Town Hall of St. Marylebone, and on the north side was the dominating pile of the Metropolitan Railway Hotel, with other buildings of a similar character in immediate prospect.

Again, north of that, Upper Baker-street was in course of complete rebuilding. The same fate had overtaken some of the Georgian residences of Regent's Park, which, with their spacious grounds, had long been a conspicuous feature of the district, while the whole of the southern portion of St. John's Wood, with its artistic houses and old-time gardens, and also Harewood and Blandford-squares had been swept away by the Great Central Railway.

To tell even a fraction of the alteration which had taken place in our quarter century would be wearisome, said the lecturer; those few instances must suffice, with the further mention of one of the most prevalent and remarkable types of development, viz., residential flats. Such structures were legion in number. Large blocks were springing up on all sides: in Westminster, Piccadilly and Mayfair, in Bloomsbury, Marylebone and Maida Vale, in Portland-place, and in the medical quarter of Harley-street, they appear in increasing numbers, offering every degree of accommodation, rent and variety of service.

In this wholesale reconstruction there was present one constant feature, the spacious and imposing nature of the new buildings. The transition had been not alone from old to new, but also from small to large, often from the mean to the noble, witness the change from the insignificant buildings of nineteenth-century Oxford-street to the magnificent classical pile of Selfridge's Store, which bid fair, when completed, to be one of the architectural sights of London. It seemed that although London was largely a city of Commerce, its business men had at last discovered the value of edifice as a commercial asset, with the result that our old metropolis bid fair to become as remarkable for the beauty and dignity of its buildings as for its magnitude and commercial importance. That that tendency towards betterment was significant would be found when one sought for the causes which had given rise to that astonishing development.

In the first place, there would normally be a certain amount of rebuilding every year, but this of itself would be quite inadequate to account for the phenomenon we are considering. A more potent cause was the fact that from time to time an overwhelming pressure from within broke through the crust of existing conditions and manifested itself in an outburst of constructional activity. Such a periodic recurrence took place, for instance, at the end of the 18th and beginning of the 19th centuries, when the Bloomsbury squares were laid out and the fashionable quarter of South Marylebone created. One of the things which made possible the wholesale development we were now experiencing was the fact of the West End of London being chiefly held by the owners of large estates, whose custom it was to grant leases which fell out at the same date. Certainly the ownership by the Crown of the whole of Regent-street and its prolongations was the main factor which made possible its simultaneous rebuilding. But the pressure from within the organism, the moving force, had a deeper seat than mere estate routine. There was no doubt that during the last quarter of a century there had been a wave of commercial expansion, which had brought in a demand for larger business premises. Temporarily checked, but not arrested, by the war period, the tide flowed westwards and filled the Oxford-street and Regent-street shops. They in turn needed warehouses and factories, a need which transformed the region round Oxford Market from one of small tenement houses to one of commodious storage and manufacturing accommodation. The rise of the motor trade changed the face of Great Portland-street. The multiplication of banking and insurance branches and the advent of the multiple shops increased the demand and forced on the development. Westward and northward flowed the tide, sweeping along Oxford-street, Baker-street, Marylebone-road, Edgware-road, along the Bayswater-road to the White City, along Kensington High-street to Olympia. At any of these points its operation may at this moment be observed in full swing, notwithstanding the backward drag of the Rent Restrictions Act.

As to the marvellous growth of residential flats, the visible change produced by their wholesale construction was indicative of an invisible but no less real change in the habits of the Londoner. Forty years ago flats were just beginning to make their appearance. They were few in number; the public looked askance at them because the inclusion of a number of tenements under the same roof seemed to cut athwart the principle that an Englishman's house was his castle, and because those who occupied them were regarded as a migratory population. But now that view has entirely gone and the construction of residential flats is a favourite investment for capitalists of the most conservative tendencies. The demand for compactness was emphasised by the advent of the motor-car. The comparative immobility of home life was broken down by the occasions which the car provided of getting rapidly into the country, and the motorist gladly took the opportunity of limiting the responsibility of his domestic establishment. The demand for three bedrooms and a garage had become proverbial.

There was another phenomenon which had appeared in London which might be called an economic change, *i.e.*, the filling up of the houses which were previously unoccupied. At a meeting held at the Surveyors' Institution in 1908 on the subject of London, it was stated that at that time there were 50,000 empty houses within the limits of the County of London, a number which must be doubled to include the enormous area occupied by the ring of outer suburbs. Now not only was almost every house occupied, but many afforded accommodation to two or three tenants where previously there was but one. This transformation was affected by the war shortage.

Those three main causes therefore—the commercial expansion, the alteration in the domestic habits of the people, and the shortage of accommodation—had resulted in the changes we saw around us, changes which were by no means complete, but which were still in progress.

There remained the further important question as to whether the wave of commercial advancement was likely to continue, or whether it had already reached its inevitable peak and had begun to subside. The speaker certainly saw no signs of subsidence at present. Not only was rebuilding proceeding apace and at an increasing rate, but we were promised a new Embankment on the south side of the river, the remaking of the Adelphi, a new Dominion building to occupy the whole east side of Trafalgar-square, and, most ambitious of all, a reconstruction of the Charing Cross area. There was a brisk and constant demand for building sites. But on the other hand there was another and somewhat ugly side to the shield. Among London's greatest assets were its open spaces, and they were being threatened; with the lure of high prices dangling before their eyes, owners were strongly tempted to cover with buildings the squares and gardens which come into their hands when the leases of the surrounding houses expire. Mornington-crescent and Endsleigh-gardens had already been built over; the Foundling Hospital gardens were threatened, and the same danger overhung every square that was in private ownership. London could not afford those curtailments of her fresh air, and, happily, its rulers were on the alert to preserve its privileges.

Mr. J. Seagram Richardson, in his paper, dealt with the City of London. He said one of the most pleasing features of the great change which had gradually been effected in the front elevation of City buildings had been the substitution of Portland stone (and in a few cases good honest brickwork) for the dreadful stucco, or "compo," as it was sometimes called, of a hundred years ago. Nothing could be worse in architecture than the representation of something which was not what it pretended to be, and it certainly could not be in good taste.

Another, and a less welcome, characteristic of the modern City building was its increased height. But in the circumstances that, perhaps, was inevitable.

One of the most notable changes in the City in the last fifty years had been the large number of office buildings with which it has been provided. Years ago these were few in number. The great majority of professional and business men were housed in the upper floors of shops, or in the old houses of those whom, rightly or wrongly, we liked to think of as having been prosperous citizens.

The manner in which, after the war, the Londoner set to work to "put his house in order" could not be better exemplified than in the determined effort which he made to provide homes for the people and to bring his business premises up to date. It was not suggested that that enthusiasm for bricks and mortar, or steel and reinforced concrete, had been wholly inspired by sentiments of altruism. Indeed, in many cases, the reward had been great, inasmuch as rents had increased almost in proportion to the increased cost of building. Tenants of shops were forthcoming who were prepared to pay premiums for leases at rents which one could not but regard as representing the full annual value, whilst others were readily found for office accommodation in up-to-date modern buildings at rents which, before the war.

would have been regarded as impossible. The lecturer then gave some account of the rebuilding changes throughout the City. He then said that with regard to the future no one could say when or where the growth of the City was likely to cease. One heard sometimes that the trend of the City was towards the West, and there might be some foundation for the suggestion in the removal of a comparatively small number of showrooms to the West End. The City did not attempt to compete with its friends there in retail trade, and one could imagine that it might be a convenience, for some "soft goods" agents and others, to be in close touch with their West End customers. In the same way it could not be denied that a few business firms had been attracted to Regent-street by the relatively low rents for office space which at present obtained there. But one seeking premises of any description in the City would find that rental values generally were being maintained, and that there were few bargains going. So long as the City retained such institutions as the Bank of England, the Stock Exchange, the great financial houses, the whole of the commercial markets and exchanges, Lloyd's and the great shipping interests (it could afford to hand over the passenger traffic to the West End), it would have nothing to fear. London was still the largest port in the world, and as proximity to the river and the docks was essential to all interested in commercial enterprise, there could not be any rivalry between the City and the West End, and it was not without significance that the White Star Line decided only a month ago to remove their headquarters from Liverpool to London.

If the present rate of development in the City is to continue, the lecturer thought greater advantage would have to be taken of the proximity of Southwark, access to which could be improved either by bridge or tunnel, and he for one regretted the enforced abandonment of the proposed St. Paul's Bridge. There were indications that the central position of "the Borough" was beginning to be appreciated. The demand for premises there was improving—a notable example already having been set by the London County Council on the south side of the river—and it was conceivable that, in the not too distant future, Southwark might come into its own.

PLASTERWORK

The fifth of the series of lectures on the building crafts, under the title of "Plasterwork," was given by Mr. W. H. Ansell, F.R.I.B.A., at the Polytechnic, Chiswick, on Thursday, March 7. He said that the custom of covering the surface of walls and ceilings with a mixture of lime and sand prevailed among the very early civilised nations of whom we had any record. Having briefly referred to Egyptian, Cretan, Greek and Roman work, the lecturer said that there were two kinds of lime used in plasterwork, which had very different qualities. They were carbonate of lime and sulphate of lime. The carbonate of lime was the ordinary quicklime which was produced by burning limestone in a kiln. This was the base of all ordinary mortars and plasters. Sulphate of lime was what we knew as plaster of paris, made from gypsum or alabaster, and had the property of setting hard in a very short time after being mixed with water. It was, therefore, mostly used for casting. Quick-lime, or carbonate of lime, produced much heat when mixed with water, and it was unsuitable for use in plastering until it had been slaked for a very long time. It could hardly be kept too long, as with time it lost the heat, and became cool and pliable, and could be modelled like thick butter, without danger to the fingers. The Romans considered that it should be kept standing at least for three years before it was used. The fault of much modern plasterwork was that the lime was used too soon. The stucco-duro of the Romans and Italians, as well as the parge and plaster of the English craftsmen, had as a base ordinary carbonate of lime. The sulphate of lime was the base of most modern decorative plasterwork of the kind known as fibrous plaster, which was cast from a model in a mould usually made of gelatine. It was essential to keep those two important constituents clearly separated in one's mind. Carbonate of lime was a slow-setting material which could, therefore, be modelled and stamped and dealt with in various ways. Sulphate of lime was a quick-setting material which could be cast, but not modelled. It could be carved after casting.

The connection with England became complete when, in 1538, Henry VIII built his great palace of Nonesuch, near Cheam, in Surrey. He procured "many artificers, architects, sculptors, and statuaries, Italian, French and Dutch, as well as natives, who applied to the ornament of the mansion the finest and most curious skill they possessed in their arts." Previous to this there had been practised in England the somewhat primitive art of pargetry. From very early times there was a craftsman called a "dauber." He was the man who carried out the "wattle and daub" work so often mentioned. This consisted of covering the outer walls of timber-work with hazel wattles or sticks, and squeezing a layer of clay between and over the wattles. The spaces between the upright framings of half-timber work was often filled with clay, wedged tightly in, and plastered outside. But early plastering or parge was made of lime, sand, and hair—mixed sometimes with chopped hay—roadscrapings were also put in it, so that the plaster thus made was coarse in quality and texture, unsuitable for delicate or fine effects in modelling. It was, however, a sound and durable material.

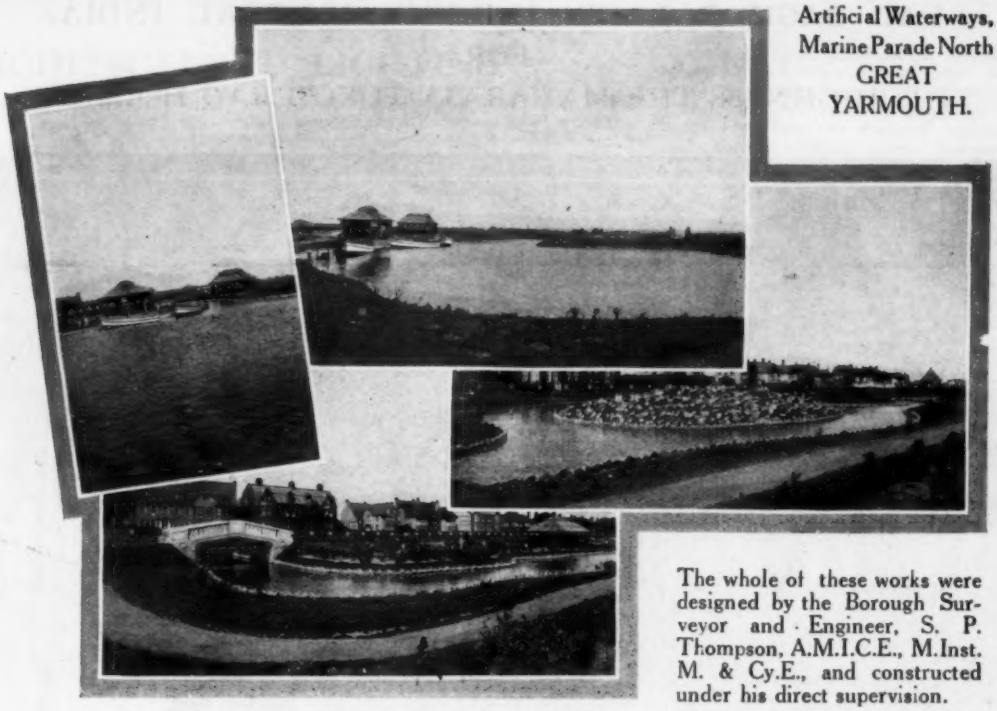
In 1547, an English plasterer, named Charles Williams, who had travelled in Italy and learned the art of stucco-duro there, came back and worked in England. He was employed at Longleat by Sir John Thynne. His fame spread, and we found Sir William Cavendish asking for the loan of "this cunning playsterer whom he had heard had made divers pendants and other pretty things and had flowered the Hall at Longleat," for his new work at Hardwick. The request, apparently, was granted, and the "cunning playsterer" modelled the great frieze, but the Hall was never finished. Before it could be inhabited, Bess of Hardwick had started the new Hall, the one that now existed. The first work was dismantled, but not entirely removed, and a considerable amount of the first frieze was remaining. The lecturer said he had himself seen it about 15 years ago, and though it had been exposed to the weather for 300 years, the edges and the modelling were beautifully sharp and clean. This early English stucco-duro was made of local lime, from the Derbyshire limestone, air-slaked for a long time, mixed with fine grit. Williams seems to have established a school of stucco workers in Derbyshire, and the deep frieze in the new Hardwick Hall was their work. It was, perhaps, the finest example of stucco-duro work left in England.

About this time the art of the plasterer began to assume a more truly English character. For one thing, the materials for stucco, the white marble dust and so on, were difficult to obtain, and the Italian character, the figure modelling, demanded training and skill that the English lacked. The tendency, therefore, was to go back to the coarser material, the lime and sand and hair, the pargetry of earlier days. The skill was greater than before, because of the Italian examples and influence, and a genuine school of English craftsmanship grew up and flourished, and in Elizabeth's time, and the early Jacobean years, plastering attained its zenith as a national craft. Ceilings, mantelpieces, the walls above the panelling, the walls outside, the panels between the timber work, were all covered with decorative patterns in plaster. The men of this time seemed to have an instinct for the right treatment of their somewhat homely material. The sharp edges and high relief of the stucco-duro gave place to softness, easiness of line and contour, low relief, and entire absence of mechanical effort. The right way of dealing with plaster was to recognise the qualities of the material, its plastic nature, and to employ it naturally, not seeking to emulate in it the greater relief, the deep undercutting, the sharpness of line, that belonged more rightly to wood or marble carving, and also to avoid a rigid machine-like effect either in plane or line.

An early seventeenth-century form of ceiling was that in which pendentives were used, a survival of the pendants of fan-vaulting. The fishroom at Audley End was one of the most famous of these, and a Westmorland ceiling of this kind had been reproduced at South Kensington Museum. The plasterworker of this time seemed to have gone direct to nature for many of his floral motives. There was practically no plasterers' tradition in England, the crude work of the Middle Ages gave no lead whatever to these eager souls of the Elizabethan and Jacobean times, and this might be the reason why the design of natural leaf forms and growths was so free.

Then there came the great change, when Inigo Jones cleared the ground of the Flemish and German influences that were affecting English building and introduced a purer classic form. The great fire of London gave Wren his supreme opportunity, and his plasterwork showed the general trend of the times. Men must now work under architectural direction, the old casual, all over pattern of ribs and straps, that began casually, and finished when it arrived at the opposite wall, whether at the end or the middle of a panel did not matter, was now discarded. There must be in the ceiling a definite architectural conception, a main design for the work as a whole, then the plasterer could fill in his details. Inigo Jones, at Coleshill and Raynham, introduced the new style of work which was carried on by Wren. Although the lay-out of the ceiling became more severe, the modelling of flowers and fruit, and so on, became much more naturalistic, and high in relief. The old plaster-workers translated the ideas they got from nature into their material; they did not imitate. The far cleverer Renaissance plasterers imitated the actual forms and shapes, to such an extent that they sometimes hung flowers and fruits below the ceiling by wires or small sticks. There were some extraordinary ceilings of this kind at the Royal Hospital Chapel, Kilmainham, Dublin, done in 1684. The ceiling of the Board Room of the New River Company's Offices, 1683 (now the Metropolitan Water Board), was a good example of the Wren manner. Plaster detail was obviously much influenced by the work of Grinling Gibbons and his school.

In the eighteenth century, from about 1725 to 1750, there came a period when plaster design followed Louis XV work. Modelling practically ceased, and ornamental work was entirely cast and fixed. Then came the brothers Adam, who went back to an elegance and refinement at the opposite pole to the robust modelling of Wren. Adam had studied in Rome, and seen the stucco-duro work there, and he reintroduced many of its effects in his work. It was usually cast in a composition, not of genuine plaster, and was fixed up to the ceiling and walls. The Adam style became enormously popular, and at its best was delicate and charming, but was absolutely dead compared with the best plasterwork of Elizabethan times. Modern plasterwork, the use of fibrous plaster, a method of forming plaster on canvas and wooden frames, was a convenient and reasonable method of plaster decoration, and could be exceedingly good, or exceedingly bad, according to the taste and skill of its designer and modeller.



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ARCHITECTURAL LIGHTING

A paper on this subject was read by Mr. Waldo Maitland at the meeting of the Illuminating Engineering Society, held at 15, Savoy-street, Strand, W.C., on March 19. The lecturer said that while, of necessity, all lighting was architecturally important, the new development aimed at making lighting a more prominent element in the design of buildings, so that the artificial lighting became an essential part of the architectural decoration, and, in some instances, the major element. The chief characteristic of that mode of lighting was the fact that it was built into the fabric of the building, and formed an integral part of the architecture. Architectural lighting, incorporating the lighting units in the structure of the building, might be obtained from (*a*) panels in the ceiling, (*b*) panels in walls, (*c*) lighted columns, (*d*) lighted lintels, (*e*) cornice lighting.

In some instances, the lighting effects were obtained by reflection from opaque surfaces, i.e., indirect lighting, while in other instances the light was obtained through translucent material, providing either semi-indirect or a direct form of illumination. In the former, the effect was achieved by reflection from white or coloured surfaces, while in the latter the quality and colour of the translucent material was important. The indirect method, however, inevitably suffered from the lack of vitality associated with this form of lighting, and, in general, when employed, required supplementary lighting methods to give complete satisfaction. It might be possible at some time in the future to recommend a relation between the area and brightness of indirectly lighted surfaces and the area and brightness of luminous surfaces within the field of view, and so obtain a balanced architectural effect. There was one important feature of these architectural methods of lighting which considerably assisted the furtherance of good lighting, namely, that high intensities of illumination could be provided from light sources within the field of view which were of comparatively low brightness, and, in the best examples, any semblance of glare was avoided. Another phase in architectural lighting was the use of light to modify the conception of space, and to give a sense of separation between one room and another: for example, by lighting the surfaces within the field of view in one room to a greater brightness than those in the adjoining room. Of course, a similar result was frequently obtained by the careful choice of colour schemes in adjoining rooms. An excellent example of that effect of separation produced by coloured lighting was to be seen at the May Fair Hotel in a reception room and adjoining ballroom.

Interior Lighting.

An interesting effect had been obtained in some instances by lighting the caps of columns, and that method might be applied to provide general lighting in the interior when the columns were sufficiently close together. To be at all successful from an architectural point of view, the columns themselves had to be very carefully designed. An example was to be found in the Lyons Corner House in Oxford-street.

The illuminated columns on the ground floor of the main Berlin Electricity Showrooms formed an interesting feature at the head of the stairway leading to the floor below. Although the columns were luminous, their position did not suggest that they were intended for supporting loads, and hence, contrary to many examples of lighted columns, they did not convey the appearance of weakness. Wide metal bands formed capitals to the columns, and those in turn were supported by subsidiary vertical and horizontal strips. Auxiliary lighting was provided from the upper portion of the frieze and the cornices, giving a general even brightness to the ceiling. In other examples, columns were built up from units of moulded lighting glassware on either side of doorways. This was a feature which could be incorporated when the main fabric of the building was completed.

Exteriors.

He had, said the lecturer, been dealing with purely architectural lighting as applied to interiors, but if logical methods of applications were evolved, there was no reason why the lighting of building exteriors should not become a natural thing in the future. Already many daring attempts had been made with remarkable success. While the daylight appearance of an interior was important (although there were many instances where the interior was essentially designed for artificial lighting), this question became of still greater importance when considering exterior design, and the best schemes were those which served the dual purpose. Many examples of architectural lighting applied to shop-fronts had already made their appearance in Germany and France, and to some extent in this country, and the following examples showed that electric lighting could play an important part in the general effect of the front.

While the main consideration, from a commercial point of view, was obviously that of giving a shop-front added power of attraction, there was no reason why the architect could not obtain both commercial attractiveness and architectural soundness by careful arrangement of lighted surfaces on the façade. In some instances, selected surfaces of the building might be lighted up from lamps concealed on the face of the building, and in others luminous surfaces might be provided by lamps behind translucent materials, such as opal or frosted glass. The character of the ordinary shop-front only remained visible as long as daylight lasted, but as soon as night came its identity vanished, and it was in maintaining that identity at all times that architectural lighting could be successfully employed.

When lighted glassware was employed on a façade, it should be discreetly handled so as not directly to interfere with the apparent stability of the structure; in some instances grave errors had been made in that direction which had resulted in a decided weakness in design. Exterior architectural lighting could be obtained by illuminating horizontal bands, the façade of the building being provided with white horizontal surfaces, each provided with a cornice to accommodate lamps on the upper side. The daylight architectural lines of the building were thus emphasised at night time and the appearance was as effective by day as by night. Other façades of a different character were almost entirely composed of glass, and yet, in spite of this fact, the designs did not suggest that the glass was supporting the building. The interplay of vertical and horizontal lines could be made to give the design an interesting character, the lettering on the frieze being both decorative and valuable from an advertising point of view. In architectural lighting designs, as applied to shop exteriors, all signs should form an integral part of the façade.

The Galeries Lafayette, Paris, represented a well-known example of marquise lighting, and was interesting from its magnitude and commercial value. The marquise, which is 500 ft. long, consisted of a strong metallic frame to carry the glass, in the structural design of which great care was taken to permit easy access to lamps. The construction of such a large marquise presented a difficult problem. Most of the glass in the marquise was ribbed on one face, and designs were made by cutting these ribs in certain parts. Some portions of the glass were left clear, while others were rendered diffusing by sand-blasting or acid-etching, all of which gave variety and relief to the material. The marquise itself required 800 lamps of 500 watts each, while the outer edge, which defined its shapes, used 1,500 lamps of 500 watts each. There were in all 2,600 lamps, totalling 625 kilowatts, and when it was borne in mind that the lighting circuits were arranged to give blending of colour it would be readily appreciated that the marquise appeared at night time as a colossal jewel. The new marquise of Messrs. Selfridges was perhaps one of the best examples in England of decorative exterior lighting of that kind.

Another interesting job was the Galeries Lafayette in London—a well-thought-out lighting scheme. The whole had the effect of a stage, the surrounds being left dark, fulfilling the function of a proscenium arch. A feature which had great significance in the design of that front was that all lighting surfaces were placed at right angles to the façade, not in any way destroying the effect of stability, which is lacking in many other examples. Stencilled lettering on the frieze was attractive and had essential advertising value, and the daylight appearance, as well as the night one, was very satisfactory. The translucent material which had been used consisted of sand-blasted designs on plate glass, but unfortunately the effect of the design was lost due to the poor placing of lamps which failed to synchronise with the design.

Simultaneously with the development of modern architectural lighting practice as already described, there had evolved a range of lighting fittings to accord with those modern conceptions. One might almost term these fittings as the necessary detail to architectural lighting. The design of these fittings was free and generally simple in character, the form of the fitting predominating. A further characteristic was the fact that there was a predominance of glass, and the tendency to employ a number of small lamps in the place of a few lamps of higher wattage, and frequently those fittings presented quite an extensive luminous surface of low intrinsic brilliancy. While the best results were only obtained when those fittings were used as supplementary to the main architectural lighting, there were many instances where modern interiors were exclusively lighted by such means. When used, however, to supplement the illumination provided from truly architectural lighting, those auxiliary fittings were not necessarily intended to augment the general lighting of the room, but were provided with a view to obtaining luminous decoration. Consequently, the question of the luminous efficiency of the fitting was, therefore, frequently secondary in importance to the richness and decorative effect obtained. On the other hand, when these fittings were called upon to provide general illumination, the question of luminous efficiency ranked at least equally with form, etc.

In a selection of these fittings there was almost unlimited variety, from those which rigidly took simple geometric shapes and were otherwise simple in character, to those which were decorated by means of sand-blasted or enamelled designs.

In conclusion, the lecturer said that with a view to giving architects and engineers facilities to study these new methods of lighting, the Lighting Service Bureau of the Electric Lamp Manufacturers' Association, at Savoy-street, W.C.2, had inaugurated an architectural department intended to show the effect of light in relation to space and the importance of combining the lighting as an intimate element in the architecture.

Kirby Hall to be Restored.

Kirby Hall, Northamptonshire, which is considered a perfect example of the great English houses of the Renaissance period, will shortly be taken over by the Office of Works for gradual repair and restoration. Kirby Hall is in the Weldon district. It was built in 1570 for Sir Humphrey Stafford, and was sold, five years later, to the Hatton family. From 1638 to 1640 Sir Christopher Hatton employed Inigo Jones to repair and "modernise" the house.

LOCAL GOVERNMENT OFFICIALS

Two decisions have been delivered within a period of ten days of the greatest importance to local government officials. In the first of these cases, Brown *v.* Dagenham Urban District Council (*The Times*, February 23), the plaintiff was a superintendent assistant overseer and clerk to the Council and he was claiming damages for wrongful dismissal. He had been in local government service for many years. The plaintiff had been appointed to these offices in April, 1926, and no written contract was executed, but he held under a minute which stated that the appointment should be subject to three months' notice on either side. No question appears to have been raised in the case as to the absence of a contract under seal. The appointment was made under section 189 of the Public Health Act, 1875, and it was contended that under that section no contract was valid which provided that a clerk or like official should be engaged for a definite period, or be entitled to notice of dismissal. The salary for the overseership was £400 and for the clerkship £200.

As regards the clerkship, the contention of the Council appears to have been that the plaintiff had resigned his appointment in April, 1927, but the Court found that the plaintiff had not resigned that office at that date, nor at all, neither had the Council accepted any resignation or then dismissed him, but on the contrary he had been granted three weeks' leave of absence and he was entitled to his salary during this leave of absence, and on this point judgment was given for the plaintiff for £40, which had been paid into Court with a denial of liability. But the main point in the case arose out of a dismissal from both offices after this leave of absence, and although certain allegations as to misconduct had been made against the plaintiff it may be said that the Court found them unfounded in any way.

As regards the clerkship the Court held with reluctance that the Council were empowered under section 189 of the Public Health Act 1875 to dismiss such an officer at their pleasure. The section provides, *inter alia*, "Subject, in the case of officers any portion of whose salary is paid out of moneys voted by Parliament to the powers of the Local Government Board under this Act"—(This refers to section 191.)—"the urban authority may pay to the officers and servants so appointed" (*i.e.*, by them) "such reasonable salaries, wages or allowance as the urban authority may think proper, and subject as aforesaid every such officer and servant shall be removable by the urban authority at their pleasure."

The Court also held as regards the overseership that the power of removing an overseer conferred by section 5 of the Local Government Act, 1894, although that section does not contain the words "at their pleasure," was given in the widest terms, and that, in accordance with the views expressed by text-book writers on this subject, an assistant overseer could be dismissed at any time without reason and without notice.

In the second case, Field *v.* Poplar Corporation (*The Times*, February 14 and 15 and March 2), the plaintiff had been appointed in 1926 senior sanitary inspector at a salary of £450 per annum, having held offices before that date, but in 1927, after the decision of the case Roberts *v.* Hopwood (1925, A.C. 578) in the House of Lords, the Corporation desiring to effect a reduction in the salaries paid by them gave the plaintiff notice that his salary would be reduced from the following November 1, and a resolution to this effect had been passed October 27, 1927. The notice sent to the plaintiff referred to the above decision of the House of Lords, but it is to be noticed that the Court pointed out that in this case there was no charge of *mala fides* or lack of exercising discretion such as was made in that case, and the auditor in his report had made no criticism of the salaries paid to sanitary inspectors.

The plaintiff's action took the form of asking for a declaration that the resolution was *ultra vires* and invalid so far as it related to him; an injunction restraining the Corporation from acting upon the resolution and for other relief. No notice of dismissal was given in this case, and the plaintiff had not resigned his appointment, but a question was raised whether he had not indirectly consented to the reduction.

This case turned upon another series of Acts and Orders, and the complication of the legislation was animadverted upon by the Judge, but we will endeavour briefly to indicate how we believe the matter stands, as it may prove of some service to local officials. This being a metropolitan case, the metropolitan statutes have to be considered. Section 62 of the Metropolis Management Act, 1855, gave the Metropolitan Board of Works, and the board of works of every district within the Act, power to appoint their officers, to pay them such salaries as they think fit, with power to remove them at pleasure, and to this extent this section appears to correspond with section 189 of the Public Health Act, 1875.

Section 107 of the Public Health (London) Act, 1891, gave the appointment of sanitary inspectors to the "sanitary authority," the sanitary authority being defined in section 99 and varying in different districts, but the London Government Act, 1899, by sections 1 and 4 abolished those sanitary authorities which were vestries and district boards and created the boroughs mentioned in the First Schedule and vested the powers and duties of the vestries and district boards in them.

As regards officers generally these powers have to be sought therefore under the Metropolis Management Act, and in the case of sanitary inspectors under the Public Health (London) Act, 1891, and section 108 of the latter Act, provides that the Local Government Board (now the Ministry of Health) shall have the same powers as they have in the case of a district medical officer of a poor law union with regard to the qualification, appointment, duties, salary and tenure of office of every medical officer of health and sanitary inspector, one half of their salaries being paid by the county council out of funds received from the Exchequer. Then paragraph (b) provides that a medical officer of health may be removable with the consent of the Local Government Board or by the board, and paragraph (c) that any such medical officer shall not be appointed for a limited period only. Under section 106 the Local Government Board have power to make regulations concerning the mode of appointment and the proportions in which the expenses of appointment and the salaries and charges of medical officers of health shall be borne by the sanitary authority and by section 108 the same power is extended to sanitary inspectors, and regulations have been issued under these sections, among which are the following: "Every sanitary inspector shall continue to hold office for such period as the sanitary authority may, subject to our approval, determine at the time of his appointment, or until he die or resign or be removed by such authority or by us or be proved to be insane" and "the sanitary authority shall pay to every officer such salary as may be approved by us." The position of a chief sanitary inspector is, however, even made clearer, for section 7 of the Public Health (Officers) Act, 1921, expressly applies the above provisions of section 108 of the Public Health (London), Act, 1891, paragraphs (b) and (c), to the chief or senior sanitary inspectors of metropolitan borough councils. The result of this network of legislation was that the Court held that the plaintiff's salary could not be reduced without the consent of the Minister of Health and that a letter from the Ministry saying they were prepared to approve "provided that the Corporation gave any notices and obtain any consents which may be legally necessary," written two days after the proceedings were commenced, was not an absolute consent.

It was said that some 1,000 officials were affected by this decision. Roughly speaking, it may be said that where officials are appointed and paid by the local authority, that is to say, outside the metropolitan area under section 189 of the Public Health Act, 1875, or within the metropolitan area under section 62 of the Metropolis Management Act, 1855, then they can be dismissed at pleasure, a condition of affairs adversely commented upon by the Court in Brown's case, but where a contribution is made to their salary by moneys derived from the Exchequer, as under section 191 of the Public Health Act, 1875, and under section 108 of the Public Health (London) Act, 1891, then the consent of the Department is necessary.

A subsidiary point in the case requires to be mentioned. It was contended that the plaintiff had consented to the reduction by being a member of the National Association of Government Officers (Nalgo), and having accepted their services when they had secured a rise in salaries in 1920, this society having approved of the resolution for the present reduction, but the Court held that the plaintiff was not bound by their decision in view of the fact that he had opposed and voted against it.

THE POWERS OF THE ARCHITECT—VI.

By W. T. CRESWELL, Barrister-at-Law.

More often than not questions arise as to the powers of an architect to order "extras," especially when the employer raises an objection to pay the contractor at all, or to pay the sum charged for them.

Most contracts empower an architect to order such extras as are necessary in order that the work as *originally contemplated* may be carried through to a satisfactory result; that is, additional oddments which do not alter the original nature of the work, such as making the structure more elaborate or luxurious. So any variation made by him on his own authority without the express sanction of the employer must ensure some obviously better method which has suggested itself to him during the course of the work.

An architect has no implied or customary power enabling him to order definite "extras" or vary the terms of the building contract. If he therefore orders such "extras" he has not the power to bind the employer to pay for them.

The necessary authority of the employer to the architect sanctioning "extras" may be written or oral; but if the terms of the contract require that orders for "extras" shall be written either by the architect or the employer, this is a condition precedent to payment; and the architect has no implied authority to dispense with it.

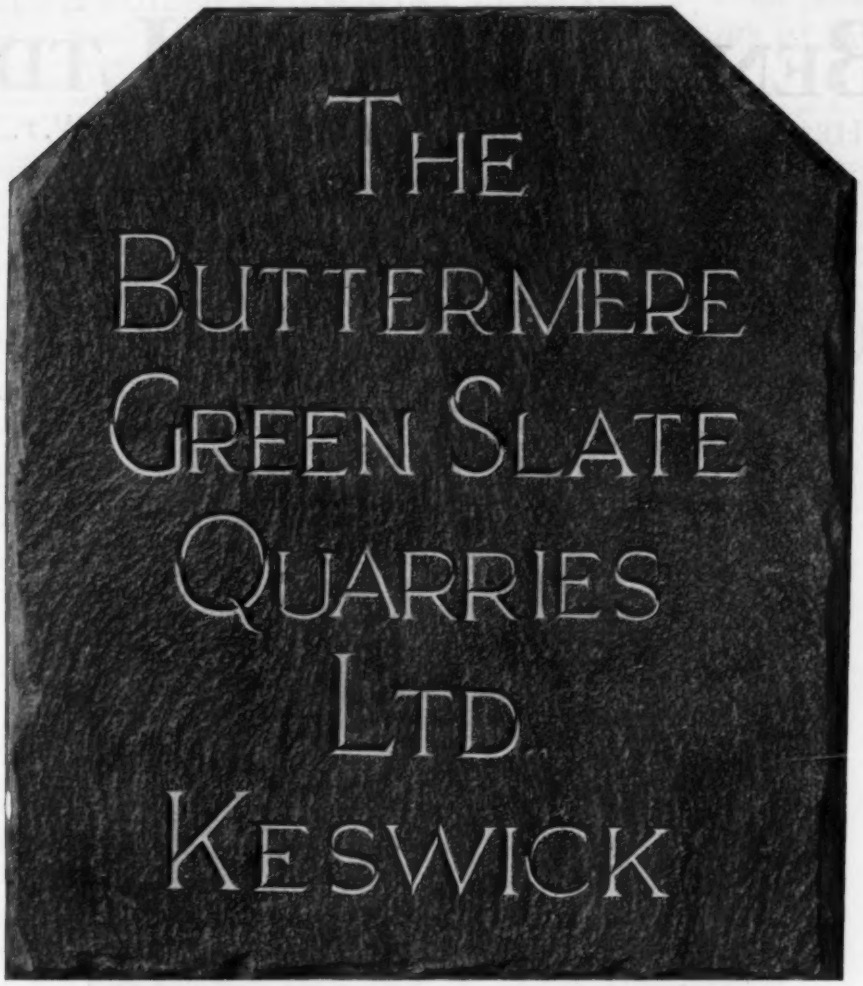
Where the contract provides that the architect may order certain additions or omissions in the work contracted for, that again does not mean that he is empowered to vary the work extensively or to make new contracts for other work not contemplated in the original contract. He cannot certify payment to the contractor for such works without the authority of the employer.

Unless the power of the architect to order "extras" is determined by one of the written contract documents, it is for a jury to determine what power he has, or whether he has any power at all in that direction.

An architect should always remember that in general, in a lump-sum contract, an employer is not liable to pay any additional amount for "extras" unless he is informed or is made aware before the "extra" is ordered that it will increase the expense.

Also, an architect has a recognised duty in the matter to the contractor, who, not being able to recover for "extras" not properly authorised, in making a claim for them is put to the proof of showing that the architect *had* authority to order them.

If the contractor carries out variations ordered by the architect in excess of his authority, it is a breach of his contract with the employer.



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RHODES HOUSE, OXFORD. *Architect:* Sir Herbert Baker, A.R.A.
LORD WANDSWORTH INSTITUTION. SURREY. *Architect:* E. Guy Dawber, Esq., A.R.A.
BARCLAYS BANK (DOMINION, COLONIAL AND OVERSEAS BRANCH), GRACECHURCH STREET, E.C. *Architects:* Messrs. Campbell Jones, Sons and Smithers.
MESSRS. BOOT'S NEW CAFE, BRIGHTON. *Architects:* Messrs. Bromley, Cartwright and Waumsley.
GENERAL BOOTH MEMORIAL HOSTEL, DENMARK HILL, S.E. *Architects:* Messrs. Alex. Gordon and Morriss Viner.
MESSRS. A. WANDER, LTD., KINGS LANGLEY. *Architect:* J. A. Bowden, Esq.
MESSRS. GUNTER & CO., LTD., BERKELEY SQUARE, W. *Architects:* Messrs. T. P. Bennett and Son.
MESSRS. SYNTHETIC AMMONIA AND NITRATES LTD., BILLINGHAM. *Architect:* L. H. Bucknell, Esq.
ORTHOPÆDIC HOSPITAL, HARLOW WOOD, MANSFIELD. *Architects:* Messrs. Bromley, Cartwright and Waumsley.
MESSRS. BRIGHTSIDE AND CARBROOK CO-OPERATIVE SOCIETY LTD., SHEFFIELD. *Architect:* W. A. Johnson, Esq. Etc.

As makers of *all kinds* of Cooking Apparatus, the firm will be glad to assist Architects in the preliminary stages of a job where there is a kitchen, by advising and planning what, in their opinion, they consider to be most suitable.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

Plastering External Walls.

Sir,—I should be greatly obliged if you could give me a good specification for plastering the external walls of a house, and one which enables the colour to be mixed with the final coat. I have found, in numerous cases, that if lime is used, and not Portland cement, a pleasant cream effect can be obtained; but when Portland cement is used it is not possible to obtain this pleasing effect, although it may be better from the weathering point of view. I should be glad if you could give me any information on this matter, and also, perhaps, on the best methods of obtaining a coarse texture, such as rubbing with a sack, scraping with a trowel, etc.

Inquirer.

Mastic for Pointing.

[Reply to "Mastic," March 22.]

Sir,—I note with interest "Mastic's" comment on this material and the locality where he used it, and as I come from the West Riding I think I can give the information required. This material is simply very fine sand, sifted through a piece of muslin. It must be free from all moisture and mixed with boiled linseed oil (not raw), which acts as a drying and setting agent. The reddish substance is merely dry Venetian red, which also acts as a binder, but is not really necessary. I have found this to be an excellent material for pointing reveals of sashes and window sills, and also for repairing stone sills which may have been chipped.

Care should be taken to give the work to be treated a rub over with boiled oil before applying the mastic. If it is possible to let it stand a day or two before painting, so much the better, but I can say that the mastic will adhere to wood, stone, brickwork and iron, and will set as hard as stone.

J. A. Ingham.

Basement.

[Reply to "Troubled," March 29.]

Sir,—When asphalt is applied to the interior surfaces of a basement to exclude flood water, it is always necessary that a further lining of concrete to the floor, and concrete or brickwork to the walls, should be provided, in order to prevent the asphalt being forced away by the pressure of water. Everyone who is concerned with work of this nature should take the trouble to read up the laws of hydrostatics. They are very simple, although frequently expressed in complicated language. The basis of them all is that water will always try to find its own level, and, in doing so, will exert an upward thrust which is equal to the weight of the water above the level at which this thrust is exerted. The one peculiar thing is that this thrust will not only be exerted in an upward direction, but also in all horizontal directions.

A cubic foot of water is usually estimated to weigh 62½ lb., and, therefore, for every foot in height above the floor level to which the water rises around a basement, there will be an upward pressure of 62½ lb. upon every foot super. of this floor surface. It is therefore obviously absurd to apply a *rendering* of any material, no matter how waterproof, which would be burst up by this pressure. The design of a loading layer of concrete over an asphalt membrane, or of a similar floor of concrete waterproofed integrally, is governed by the same principles that are followed in the design of suspended concrete floors, excepting that in the case of a suspended floor the dead weight of the concrete slab has to be added to the superimposed load, whereas in the case of a basement floor the dead weight of the concrete is helping to counterbalance the load.

The best remedy, now that the asphalt has failed, would be to form a further complete inner lining of waterproofed concrete, preferably reinforced by expanded steel or a meshwork of steel rods. An absorptive coating of ordinary lime plaster will be necessary upon the surfaces of the waterproofed concrete walls, in order to prevent excessive condensation.

L. E. Walker.

Ceiling Board.

[Reply to "Speed," March 29.]

Sir,—Some makers of ceiling board provide stout paper strips to cover the joints, which can afterwards be distempered over and show very little. I recently saw an interesting experiment where a ceiling was lined with ceiling board, and then set in lime putty. I am informed that the experiment has proved quite satisfactory.

Finish.

[A reply to this question has been posted to our correspondent.]

Garages.

[Reply to "Plan," March 29.]

Sir,—I know of no by-law governing this matter, but the planner will obviously exercise due discretion with respect to fire risks. In any case, it would be foolish to content oneself with a timber roof between the garage and bedrooms over. As a matter of fact, I believe I am right in saying that fires in private garages are of very rare occurrence and not considered an important risk by the insurance companies.

Sanity.

Light and Air Question.

[Reply to "Cautious," March 29.]

Sir,—The adjoining owner has not acquired a right of light, in that he has not enjoyed it for a period of 20 years without interruption. "Cautious" may, therefore, on the facts as stated, build upon or otherwise utilise his land, regardless of the fact that his doing so may involve an interference with the light which now reaches the land and buildings of the adjoining owner.

Right of Light.

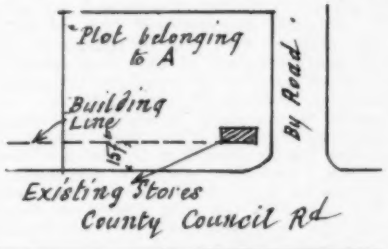
Standard Method of Measurement.

Sir,—The Standard Method of Measurement provides for the measuring of rolled steel joists as follows:—"Parts of a foot shall be measured to the next foot"; *e.g.*, 12 ft. 0½ in. shall be measured as 13 ft. This does not appear to be in accordance with the British Standard Specification for Structural Steel, etc., where the maximum margin is 2 in. over. Can any reader or member of the Committee for the Standard Method of Measurement elucidate this point?

L. E. A.

Building Line Question.

Sir,—"A" owns a corner plot (as sketch below) adjoining a road belonging to the County Council. On this plot "A" has existing stores built of wood, which are erected on the building line, viz., 15 ft. back from his boundary, as shown. "A" now wants to rebuild his stores in brick, with



living accommodation over, and the County Surveyor (who, it is stated, has to approve the plans of new buildings adjoining this road) insists that the new building shall be set back 25 ft., or 10 ft. further than the existing wooden building. Does the Roads Improvement Act give the County Surveyor the power to compel "A" to set his new stores back 25 ft.? The County Council road may be widened at some future time. Advice as to the legal position of "A" in the matter will be greatly appreciated by a

Constant Reader.

THE WEEK IN PARLIAMENT

Westminster.

The adjournment for Easter took place on Wednesday, March 27. Parliament will meet again on Monday, April 15, and on the same day Mr. Churchill will make his Budget statement.

Vibration to Buildings.

Sir A. Holbrook asked the Minister of Transport whether, in view of the damage caused by traffic vibration to buildings and underground services, any technical tests had been undertaken to ascertain whether rubber roads, such as were now under demonstration in London, as compared with other methods of road construction, had a beneficial effect; and, if not, whether those tests would be made.

Colonel Ashley said he was watching with interest the trials of rubber paving in streets, which were now being made, and, while he would bear in mind Sir A. Holbrook's suggestion, he could not at present undertake to carry out special tests of this particular surfacing in preference to other experimental work.

Woodworkers' Tools.

Sir P. Cunliffe-Lister informed Mr. Day that the following statement showed the imports, into Great Britain and Northern Ireland during 1928, of certain descriptions of implements and tools for woodworking:—

	Number.	Declared value. £
Saws, including saw blades for both hand and machine tools	13,846,608	96,925
Axes, hatchets, adzes, and matchets ...	190,148	11,139
Carpenters' and joiners' tools (including cutting parts of woodworking machinery), of kinds not specifically enumerated ...	5,200,537	133,054
Value of total imports		£241,118
Value of re-exports ...		10,782
Value of imports retained		£230,336

Statistics were not available as to the number of tools of the above kinds in use in this country, but the total selling value of such tools produced in Great Britain and Northern Ireland in 1924, as recorded in the third Census of Production, was £1,689,000. In the same year the exports of such tools were valued at £770,000 (f.o.b.), and the net imports at £239,000 (c.i.f.), so that, of the total value of such tools available for use in this country in 1924, about 20 per cent. was attributable to imported goods.

Rural Housing.

Sir K. Wood informed Viscount Sandon that up to December 31 last, the latest date for which information was available, 2,070 dwellings were included in applications made to county councils for assistance under the Housing (Rural Workers) Act, 1926, and in 577 cases assistance had been refused.

Slum Clearances.

Mr. Chamberlain told Mr. Day that, on the information available from local authorities, it was estimated that the amount of capital expenditure on slum clearance schemes in the last five years was, roughly, £5¼ millions. The loans for that purpose sanctioned by his Department during the same period amounted to £3,162,952; that sum did not include loans sanctioned by Parliament for the County of London.

THE BUILDING TRADE

INDUSTRY AND TRADE

THE BALFOUR COMMITTEE'S REPORT.

The Committee appointed by the Labour Government in 1924 to inquire into the "Conditions and Prospects of British Industry and Commerce" has now completed its labours with the production of the fifth and last volume. We have noticed two of the previous volumes before, viz., "The Survey of Industrial Relations," on April 30, 1926, and "Further Factors in Industrial and Commercial Efficiency" in our issue April 20, 1928, these being the second and fourth volumes, but this fifth volume which contains the Final Report is by far the most interesting, as it contains such conclusions as the Committee have been able to arrive at after this most exhaustive inquiry.

The Committee consisted of 19 members. In the course of the lengthened inquiry two members resigned, but their places were taken by two other persons. The previous reports have been unanimous because they contained the statistics and facts presented to the Committee, and the conclusions arrived at were reserved to this last volume, but a memorandum is appended to this last report signed by seven members, in which there is a divergence from the views expressed by the majority.

The Minority Report.

Seeing the large majority who signed the report—for five of the dissentient members signed the report but with a note "subject to the Memorandum"—we shall confine our observations to the majority report after very briefly indicating the ground on which the difference of opinion has arisen. This may be summarised in one sentence taken from the Memorandum. "What we cannot accept is the view running right through the report that nothing can or need be done by way of fundamental modification of the traditional approach to national economy and the assumption that private enterprise and free competition can be left by themselves gradually to right things." We can only further indicate the line taken in the dissentient Memorandum by saying that on the lines of the Liberal programme a National Economic Committee and a National Employment and Development Board are recommended and national control over the land, the mines, and transport, and that the Bank of England should be nationalised and its government entrusted to a board "representative of the Government, banking technique, finance, industry and the Trade Union and Co-operative movement."

Majority Report—The Export Trade.

Turning to the majority report, as this occupies some 302 pages, we can do little more in the space at our disposal than indicate a few points which appear to us of especial interest and importance. One such point is the view of the Committee that in a country situated like Great Britain the problems of maintaining the home and overseas markets are mutually dependent but both are alike dependent on the maintenance of our export trade, and the conclusion which emerges from the above considerations is that the problem of ensuring sufficient and continuous employment and a satisfactory standard of living in this country is insoluble apart from the maintenance and development of export of goods and services. This proposition is founded on the fact that the value of our net imports of food and raw materials in 1927 amounted to nearly £800 millions; four-fifths of our food supply of wheat and flour and three-fifths of our meat coming from abroad, and also the whole of the cotton, nine-tenths of the wool and timber, and more than a third of our iron ore. We commend these observations to those who consider they can cure unemployment and maintain the standard of living by incurring vast expenditure at home in processes analogous to taking in our own washing.

Export of Capital.

In this connection we should also refer our readers to that section of the report which deals with "Export of Capital." There is a school of thought here that considers that exporting capital is a crime and starves our own industries, but the Committee point out that the export of capital has played an important part in providing the food and raw material necessary to maintain the standard of living in this country.

Standard of Living.

The section on the standard of living is extremely interesting and takes a wide view, but our space only permits us to refer to one passage which relates to the idea that high wages, by leading to high purchasing power, tend automatically to stabilise themselves by virtue of the increased demand thus generated for industrial products. The report states that this assumption is mainly based on recent experience in the United States, where a very large proportion of industrial production is destined for home consumption and the home market is surrounded by the ring fence of an enormously high Customs tariff, but it states that it would be rash to infer that a similar result could be expected to follow in anything like the same degree in Great Britain, where so large a proportion of articles of consumption are imported, and that the underlying force which enables the high wages policy to be maintained has to be looked for in increased productivity—that is, the combination of high wages and low labour costs per unit. It must not, however, be thought that the Committee in any way approved high tariffs.

The report contains such a wealth of information on all kinds of subjects—wages, employment, trade restrictions, railways, road transport, rationalisation, etc., that it is impossible even to indicate its scope in a short article, and we must conclude this notice with a brief reference to unemployment.

Unemployment.

Two facts are drawn attention to in the report in connection with insurance against unemployment; firstly, that as in the memorandum of reference the provision of "sufficient and continuous employment" is linked with the "maintenance of a satisfactory standard of living," so in all statistics and practical schemes want of work is invariably regarded not from an absolute point of view, but in relation to the customary standard of life; and, secondly, that the question of suitability of employment is determined in the main by reference to the man's habitual employment, earnings and place of residence. The Committee are convinced that no scheme of compulsory insurance would be acceptable if framed on any other basis, but they point out that when the total number of persons registered as unemployed in Great Britain is compared with the supposed smaller numbers in other countries the above considerations must be borne in mind, and also the fact that no other country has a universal system which gives rise to statistics on anything like so complete a basis. The Committee expresses the opinion that the scheme has amply justified its establishment, and pays a tribute to the valuable service it has performed during the last few years of depression, and attributes the fact that, in spite of a million or more persons being out of employment the consumption of the essential necessaries of life has not declined, in large part to the system of insurance; and after comparing unemployment in the United States with that in this country, it finds that no support is given to the view that the mass of unemployment here is to any material degree due to the measures taken to mitigate its hardships.

The Provision of Work.

The following passage we think important: "It is sometimes suggested, and it has been represented to us in evidence, that the true remedy for the evils of unemployment is the provision of work for wages rather than the support of men in idleness by the provision of unemployment benefit. If by this is meant that the best and only real cure for unemployment is the expansion of production and trade we are cordially in agreement. But if reference is made to schemes for the artificial creation of work in order to provide employment we are not disposed to admit the proposition without very considerable qualifications."

Since this report was issued a very interesting document has been sent to us—the Interim Joint Report on Unemployment adopted by the Full Joint Conference on Industrial Reorganisation and Industrial Relations between the representative group of Employers and Trade Union representatives, and if our space permitted, it would be instructive to compare the two reports in detail, but as it is we can only state in brief the recommendations contained in this report, and in a few cases we append references to the Balfour Report dealing with the same questions.

The summary of the recommendations is as follows:—

(1) A comprehensive inquiry into the consolidation of existing pensions and insurance funds.

(2) Funds for assisting emigration should be largely increased and found by loan. The funds to be administered by a committee of representatives of industry under the chairmanship of a Minister. (Balfour Committee, pp. 287-8.)

(3) Unemployment in the mining industry should be considered as a special case.

(4) Orders for Government and municipal departments should be placed in the country under properly regulated and co-ordinated conditions.

(5) Trade facilities should be re-instituted under more liberal conditions.

(6) A Crown Colonies Development Committee should be formed for the purposes of development and placing orders for plant in Great Britain.

(7) Export credits should be extended in reasonable cases in order to stimulate immediate purchasing power. (Balfour Report, 48-50.)

(8) Augmented pensions out of National Insurance and Pensions Funds should be made available to workers of 65 and over who cease work, such pensions to be supplemented by employers when conditions admit.

(9) The Government should create and maintain a Development Fund capable of financing national schemes.

(10) Further extension of constructional schemes of a permanent character should be undertaken and existing schemes hastened.

(11) Rationalisation in the widest sense should be pressed forward as rapidly as possible, involving consultation with Trade Unions. The changes involved should be introduced gradually and the Trade Unions be consulted as to the best method of dealing with displacement. Firms or industries should, where possible, set up a labour reserve fund out of profits to assist displaced workers.

(12) Means should be explored for establishing a more authoritative contact between agriculture and industry.

(13) Serious consideration should be given to raising the school age for leaving. (Balfour Committee, page 208.)

(14) A Government inquiry into currency and banking policy to be participated in by

representatives of industry and finance should be undertaken immediately.

(15) Every effort should be made by the Treasury and Bank of England to have the recommendations of the Genoa Conference put into operation.

The recommendations numbered (2), (3), (5), (6), (8), (9), (12), and (13) are put forward as special measures for immediate adoption.

With regard to recommendations (7) and (14) the Balfour Report deals with Financial Facilities on pages 43-58, and it may be noted that the report at page 48 states that with certain exceptions there dealt with the existing machinery for supplying British industry with financial facilities to meet its legitimate needs is adequate and suitable, and that the rates of charge for these facilities compare favourably with those obtaining for similar services in any competing country.

THE RENT RESTRICTION ACTS

CAN A STATUTORY TENANT ASSIGN BY WILL?

The Court of Appeal in the recent case John Lovibond & Sons *v.* Vincent (*Times*, March 26) had to consider whether a statutory tenant can assign her interest in the premises by will and decided the point in the negative. Mrs. Vincent had in 1913 entered into a tenancy agreement for an hotel in Yeovil with a Mr. Walter Baxter at a yearly rent of £35 10s. On March 11, 1920, the executors of Mr. Baxter gave her notice to quit on March 25, 1921, but she remained on as a statutory tenant, and was thus in possession when she died on August 8, 1928. A daughter was living with her up to the time of her death, and she claimed that she was entitled to remain in possession by virtue of a will made by her mother under which she was executrix and sole beneficiary. The plaintiffs, who were assignees of the title through the landlord, Mr. Baxter, claimed possession. The Court of Appeal, affirming the Divisional Court, held that the right conferred by the Rent Acts is a purely personal one which could not be transferred by will. The point has never before been absolutely decided, but the decision follows the case Keaves *v.* Dean (1924, 1 K.B. 685; *The Builder*, January 25, 1924), where it was held under the Act of 1920 that a statutory tenant could not assign the whole of his interest, and Roe *v.* Russell (1928, 2 K.B. 117; *The Builder*, March 16, 1928), where it was held a statutory tenant cannot sublet the whole of the premises, for if a statutory tenant in his lifetime has no right to part with his interest *a fortiori* he cannot do so after his death.

There appears to remain, however, one further anomaly under the Rent Acts, for Lord Justice Scrutton, whose judgment is the only one at present reported, is reported as saying that the result would have been different had Mrs. Vincent died intestate. This appears to be an allusion to the case Tickner *v.* Clifton (1929, 1 K.B. 207; *The Builder*, November 30, 1928), where it was held that a daughter living with a deceased statutory tenant on his dying intestate herself became a statutory tenant by virtue of section 12, subsection 1 (g) of the Act of 1920, the expression "Tenant" under that subsection including: "The widow of a tenant dying intestate who was residing with him (the tenant) at the time of his death, or where a tenant dying intestate leaves no widow or is a woman, such member of the tenant's family so residing as aforesaid as may be decided in default of agreement by the Court." In that case, although the daughter was held to be a statutory tenant under this subsection by reason of the intestacy, it was also held that she was not liable to pay arrears of rent due from her father at the time of his death.

It may be noted that it has been held in Collis *v.* Flower (1921, 1 K.B. 409; *The Builder*, December 31, 1921), that an executor is entitled to the protection of the Act, and as a "tenant," may be a statutory tenant, and the same decision was arrived at in the case of an administratrix in Mellow *v.* Low (1923, 1 K.B. 522; *The Builder*, February 23, 1923). The plaintiff in the case under consideration was an executrix, but the above cases were not, according to the report, referred to. In Collis *v.* Flower, notice to quit was given after the death of the testatrix, and in Mellow *v.* Low no notice had been given at all (although the Court intimated that even if it had been a statutory tenancy the same principle would apply), so in neither of those cases was there, in fact, a statutory tenancy in existence at the date of the death of the deceased, and that appears the distinction between those cases and that now decided; but we may refer to these questions when the case is fully reported. In this case the plaintiff was also a member of the deceased's family residing with her, but in Mellow *v.* Low it was pointed out that paragraph (g) of section 12 of the Act of 1920 has no application where there is an executor or administrator, and this is clear from the Act as that paragraph only relates to cases where there is an intestacy.

PUBLIC AUTHORITIES PROTECTION ACT

The case of G. Scammell and Nephew *v.* Hurley and Others (*Weekly Notes*, December 1) on appeal to the Court of Appeal involved a consideration of the Public Authorities Protection Act, 1893, a statute which has been the subject of many decisions. The action, which was tried in the Court below in June, presented some unusual features as it was brought by the plaintiffs, who were consumers of electric current for light and power supplied by the Stepney Borough Council, not against the Council but against certain persons who were members of the electricity supply committee alleging that the defendants had conspired and combined amongst themselves and with the London District Committee of the Electrical Trades Union to procure a discontinuance of the supply of electric current to the plaintiffs during the general strike, and the jury had answered certain questions in favour of the plaintiffs which caused the Court to enter judgment for the plaintiffs for an agreed amount of damages.

We hasten to say that on the appeal to which we are now referring this judgment was set aside by the Court of Appeal on the ground that one of the findings was so without foundation as to be perverse, and that there was no evidence upon which the jury could find that the members of the committee were not intending to carry out their statutory duty, although in one or two respects it might be said, especially *ex post facto*, that they had made a mistake.

The allegation of a conspiracy or any wrongful conduct was thus disposed of conclusively, and it seems unnecessary to set out the facts, for the only point we are referring to is the operation of the Public Authorities Protection Act, which had also been pleaded by the defendants. If illegal action on the part of the plaintiffs had been proved, that statute would not have afforded protection to the defendants, for to come within the Act the acts complained of must be done "in pursuance or execution or intended execution" of the statutory or public duty, but as it was held by the Court of Appeal that the defendants in anything they had done were acting in the execution of their statutory duties, then the defence of the Act had to be considered.

The words of Section 1 are: "Where after the passing of this Act any action, prosecution or other proceeding is commenced in the United Kingdom against any person for any act done in pursuance or execution, or intended execution, of any Act of Parliament or of any public duty or authority or in respect of any alleged neglect or default in the execution of any such act, duty or authority," then the proceedings shall not lie or be instituted unless commenced within six months next after the act, neglect or default complained of, or in the case of a continuance of injury or damage within six months next after the ceasing thereof.

There has been considerable difficulty under the Act in determining what is intended by the execution of a statutory duty, whether, for instance, it extends to every power or operation executed or carried out by a public authority or whether the act complained of must be directly connected with the statutory duty, and the House of Lords in Bradford Corporation *v.* Myers (1916, A.C. 242; *The Builder*, November 26, 1915) laid it down that it was not because the act out of which an action arose was within their powers that a public authority enjoyed the benefit of the statute, but only when the act was one in the direct execution of a statute or in the discharge of a public duty or the exercise of a public authority, the latter words meaning a duty owed to all the public alike or an authority exercised impartially with regard to all the public.

The Court of Appeal held here that although the defendants were under a contractual duty to the plaintiff as well as the statutory duty, the Act applied on the authority of Lyles *v.* Southend-on-Sea Corporation (1905, 2 K.B. 1), where the Corporation, who were under both statutory and contractual obligation to a passenger in their tramways, were held within the Act in respect of an accident to a passenger, the two duties being the same.

As it was held that the Act applied it was unnecessary to decide whether apart from this statutory bar to the action the facts would have disclosed any cause of action, but the Court intimated that the facts would not have given any cause of action. Thus, the effect of the cases appears to be that the act complained of to come within the Statute must be directly connected with the statutory duty. Thus, in Bradford Corporation *v.* Myers (*ubi sup.*), the Corporation were entitled to sell coke, but an act of negligence in the delivery of coke to a customer was held not to be within the statute, but in Clayton *v.* Pontypridd Urban District Council (1918, 1 K.B. 219; *The Builder*, May 3, 1918), negligence in fixing a gas meter was held within the Act, although the Gasworks Act, 1871, did not specifically prescribe as a duty the fixing of gas meters, but only their supply, but this was held to imply the fixing of meters, without which the gas could not be used.

"Building Science Abstracts."

We have received a copy of the January number of Volume II of this publication. The first volume contains 1,612 abstracts of articles, 168 references to new books, and 513 to patents, all of interest to builders, to manufacturers of building materials, to teachers of building science and to research workers, and includes comprehensive name and subject indexes. The abstracts and references were drawn from 123 different scientific and technical periodicals. In 1929 the abstracts will be drawn from a still greater number. A list of these periodicals is contained in the January number of Volume II, and includes a key indicating the public libraries in England and Wales at which the various periodicals may be consulted. In the new volume an improved classification of the abstracts has been adopted, and the range of the subjects dealt with has been extended. In the course of 1928, the first year of publication, "Building Science Abstracts" attained a wide circulation, and is now regularly distributed to all parts of the Empire and to many foreign countries.

NEW BUILDINGS IN LONDON

The Editor would be glad to receive information for publication under this heading from architects, builders, or other persons concerned.

Berkeley-street. — Development. — Lansdowne House, with an adjoining house in Berkeley-square and a block of houses in Curzon-street, has been sold to Mr. Benson Greenall, 15, New-court, Wood-street, S.W.1, for a sum approaching £750,000. There is talk of a Mayfair Theatre, and shops and flats are proposed. As soon as Mr. Selfridge, the present tenant, vacates the house in a few months' time, Mr. Greenall will complete the purchase, enter into possession, and begin the business developments.

Billiter-street.—Alterations. — The City and West End Properties, Ltd., Bush Lane House, E.C.4, have agreed to plans for the carrying out of alterations, etc., to their premises at Billiter-buildings, E.C.

Brixton.—Extensions.—The L.C.C. Education Committee have under consideration a large extension of the Brixton School of Building in Ferndale-road, S.W.8. The plans are being prepared under the direction of the architect, Mr. G. Topham Forrest, F.R.I.B.A.

Charing Cross.—Sub-station.—The Charing Cross Electricity Supply Co., Ltd., 60, St. Martin's-lane, W.C.2, have acquired an important site for the erection of a new substation, the cost of which will be about £50,000. The plans will be prepared under the direction of the chief engineer, Mr. Thorpe.

Chiswick.—Flats.—The Urban District Council have accepted the tender of the Building and Public Works Construction Co., Ltd., County Works, Swindon, Wilts, for the erection of two blocks of 54 flats each. Plans are by Mr. Edward Willis, F.S.I., M.I.C.E., Town Hall, Chiswick, W.4. The price is £64,165.

Croydon.—Post Office.—The Postmaster-General is considering the question of erecting a large new head Post Office in place of the existing building in the High-street.

Dollis Hill.—Laboratories.—Work will shortly commence upon the erection of additions, including large laboratories, etc., at the studios of the Stoll Picture Productions, Ltd., Langton-road, N.W.2. The contract will be carried out by Messrs. Y. J. Lovell and Son, 6, Bathurst street, Paddington, W.2, under the supervision of Mr. A. Trevor Houghton, 8, New-square, Lincoln's Inn, W.C.2.

Ealing.—Hall.—Plans are in course of preparation for the erection of a new church hall on a site at the rear of Halsbury-road East, Wood End Green, W. The architect is Mr. J. Armitage, F.R.I.B.A., 115, Gower-street, Bloomsbury, W.C.1.

Eltham.—House.—Messrs. Taylor, Walker and Co., Ltd., brewers, Limehouse, E., have decided to erect a large public-house on a site in Westhorne-road, S.E. The plans are being prepared, the architects being Messrs. Eley and Allen, 83, Powis-street, Woolwich, S.E.18. The cost will be about £12,000.

Kensington.—Alterations.—Sundry alterations and improvements, together with a fire escape staircase, is being carried out at the Royal College of Organists. The plans have been prepared by Mr. George P. Allen, F.R.I.B.A., of 81, High-street, Bedford. Messrs. J. Simpson & Sons, of 48, Paddington-street, London, W.1, are the contractors.

Kensington High-street.—Flats.—A frontage of 500 ft. to Kensington High-street is included in a self-contained site, Nos. 1-23 (inclusive), Upper Phillimore-place, which has been let on building lease for 99 years. Messrs. Trevor and Morris, Maddox-street, acted for the lessees, and Messrs. Chesterton and Sons, Kensington, for the Phillimore estate. The lessees are Messrs. D. Morris and Sons, Ltd., Regent-street. There will shortly be erected on this site shops, with flats, offices and showrooms.

Lambeth.—Showrooms.—Large block of showrooms, etc., are to be erected in Lambeth-road, S.E., by Messrs. Latil Industrial Vehicles, Ltd., of Fulham, S.W.6. The architects are Messrs. Imrie and Angell, 2, Mitre-court-chambers, Temple, E.C.4.

London.—Housing Development.—In connection with the new policy adopted by the London County Council of providing housing accommodation in or near the central areas of London, the Housing Committee report that, as a first instalment, they have selected four sites, having a total area of about 22 acres, for the erection of new block dwellings at: Clapham Park, Wandsworth; Shore-road, South Hackney; Loughborough-road, Lambeth; Peckham-road, Camberwell. Mr. G. Topham Forrest, F.R.I.B.A., is Chief Architect to the Council.

Marylebone. — Rebuilding. — Plans have been prepared for shops and showrooms, with suites of offices on the upper floors, of the premises at the site of Nos. 41 to 55, Baker-street, W.1. The architect is Mr. C. H. Brightiff, A.R.I.B.A., 131, Baker-street, W.1.

Merton Park.—Shops.—A large site in Kingston-road, S.W., has changed hands, and the new owners intend to erect a large block of nine shops, with two floors of flats above. The plans are being prepared by Messrs. North, Robin and Wilsdon, FF.R.I.B.A., Townsend House, Greycoat-place, Westminster, S.W.1.

New Cross.—Branch.—The large premises at Nos. 279-281, New Cross-road, S.E., have been purchased by Messrs. F. W. Woolworth and Co., Ltd., Victory House, Kingsway, W.C.2, who propose to reconstruct the premises as a branch showroom. The work will be supervised by the company's surveyor, Mr. William Priddle.

Tooting.—Alterations.—The "Foresters' Arms" public-house is to be altered and enlarged. The architect is Mr. Nowell Parr, F.R.I.B.A., 42, Cranley-gardens, South Kensington, S.W.7. The quantity surveyors are Messrs. Robinson and Roods, 37, Bedford-row, W.C.1.

Wandsworth. — Factory. — The Clozium Pleating Co., 38, High-street, Fulham, S.W.6, have decided to build a new factory, etc., on a site in Buckhold-road, S.W. The contract for the building has been placed with Messrs. William F. Blay, Ltd., Spital-street, Dartford, and the steelwork will be supplied and erected by Messrs. H. Young and Co., Westminster, S.W. The plans have been prepared by Messrs. J. Stanley Beard and Clare, F. & A.R.I.B.A., 101, Baker-street, W.1.

Willesden.—Factory.—Messrs. Lesme, Ltd., cocoa manufacturers, have agreed to plans for the erection of a large factory on a site adjoining their existing premises in Scrubbs-lane, N.W.10. The building has been planned by Mr. W. Morris Geall, architect, Windsor House, Victoria-street, Westminster, S.W.1, and the quantities have been prepared by Messrs. Gleed, Sons and Co., 8, Martin's-lane, E.C.4.

Wimbledon.—Almshouses.—The tender of Messrs. Bleach and Dorey, 41, Alexander-road, S.W.19, has been accepted for the erection of new almshouses upon the estate of the Wimbledon District Endowed Charities. The plans have been prepared by Messrs. R. J. and J. S. Thomson, FF.R.I.B.A., 49, Hill-road, Wimbledon, S.W.

Proposed Woolworth Extension, Cambridge.

Messrs. F. W. Woolworth & Co., Ltd., are considering the rebuilding and extension of their branch in Sydney-road. The architect is Mr. William Priddle, Victory House, Kingsway, W.C.2.

Proposed Station Development, Hastings.

The Southern Railway has authorised the rebuilding of their Hastings station at a cost estimated at about £200,000. The work will be put in hand as soon as possible, and will be under the direction of the company's architect, Mr. J. R. Scott, A.R.I.B.A.

NEW CINEMAS

Aldershot.—The Wellington Building Estate propose to erect a new cinema in the High street. The new buildings, which will include a large restaurant, are now being designed, the architect being Mr. Harold S. Scott, A.R.I.B.A., of King's-court, 115-117, Colmore-row, Birmingham.

Birmingham.—A private company has been registered with a £10,000 capital to acquire a piece of land having a frontage to Birchfield-road, Thornbury-road, and Canterbury-road, Birmingham, and to erect thereon a cinema or place of entertainment, etc. The secretary is Mr. W. G. Elcock, 39, Temple-row, Birmingham.

Devonport.—Tenders are being invited for the reconstruction of the Devonport Hippodrome, the cost of which will be about £30,000. The architects are Messrs. Marshall and Tweedy, 129, Pilgrim-street, Newcastle-on-Tyne. The quantity surveyors are Messrs. Fleetwood. Eversden and King, 3, New-court, Temple, E.C.4.

Glasgow.—Another cinema, the Savoy, is to be erected in Cambuslang, Glasgow, to to accommodate 2,000 people. It will have an artists' dressing-room, and a tea-room to seat nearly 200. The architect is Mr. John Fairweather, F.R.I.B.A., Glengarry, Stepps, near Glasgow.

Manchester.—A local syndicate has acquired a site purchased through the agency of Mr. William Statham, estate agent, Imperial Buildings, Oxford-street, Manchester, where they propose to erect a super cinema. The site is a prominent one adjoining the main cross roads near the "Half Way House," Cheetham Hill-road, Manchester. The plans are to be prepared by Messrs. Drury and Gomersall, architects, Imperial Buildings, Oxford-street, Manchester.

Manchester.—The contract for the proposed alterations to the cinema in Higher Cambridge-street, Hulme, of which Mr. E. Ogden, L.R.I.B.A., 1, Ridgefield, is architect, has been awarded to Messrs. Bridge and Co., of Manchester.

Preston.—We learn that a start has now been made on the new Empress Cinema to be erected in the Brookhouse district of Preston.

Southport.—The Palladium, a variety theatre and cinema, belonging to the British Theatre Corporation, has been totally destroyed by fire, except for a cafe at the front of the premises. The total damage is stated to be about £100,000. It is only three years ago since the premises were rebuilt after a fire.

CONTRACTS PLACED

Belfast.—Extensions.—Messrs. Davidson & Co., Ltd., Sirocco Engineering Works, have placed a contract with Messrs. McLaughlin & Harvey, Ltd., of Castleton Building Works, Belfast, for large extension to their works. The cost will be about £30,000. The engineer for the scheme is Mr. A. W. Brown.

Birmingham.—Factory.—A preliminary contract in connection with the rebuilding of the works of Messrs. Parkinson Stove Co., Ltd., in Station-road, Stechford, has been placed with Messrs. S. F. Swift & Sons, Ltd., Alcester-road. The architects are Messrs. A. Harrison & Cox, 109, Colmore-row.

Torquay.—Additions.—The governors of the Torquay Preparatory Grammar School have placed a contract with Mr. R. E. Narracott, Dunmere-road, for the erection of additions, which will include new classrooms, cloakrooms, lavatories, etc. The plans have been prepared by the school architect, Mr. J. C. C. Bruce, Clock Tower-chambers.

Welwyn.—Factory.—The tender of Messrs. the Welwyn Builders, Ltd., 42, Bridge road, Welwyn Garden City, has been accepted for the erection of a large factory, offices, stores, etc., for Messrs. Young, Osmond & Young, Ltd., electrical engineers. The steelwork contract has been placed with Messrs. Archibald D. Dawnay & Sons, Ltd., Battersea, S.W.11. The plans for the buildings have been prepared by Messrs. Wallis Gilbert & Partners, 29, Roland-gardens, South Kensington, S.W.7

RATES OF WAGES IN THE BUILDING TRADE

[Every endeavour is made to ensure accuracy but we cannot be responsible for errors.]

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aldershot	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Alfreton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Alnwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashford Kent	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Ashington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aylesbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Ayisham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Banbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barnstaple	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Basingstoke	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Berwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bexhill	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Birkenhead	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bishop Auckland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bradford-on-Avon	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Braintree	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Brentwood	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bridgwater	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bridlington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	*1/1½
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bromsgrove	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bromyard	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bungay	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burton-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Buxton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Canterbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Carlisle	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chorley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cirencester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Clacton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cranbrook	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cromer	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Deal	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Denbigh	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Devizes	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dewsbury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Dorchester	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dorking	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Dovercourt	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Driffield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Droitwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
E. Glam. (Mon. Val.)	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ely	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Exeter	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/5½	1/2
Exmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Fakenham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Felixstowe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Frome	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Glossop	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Godalming	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Goole	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Gosport	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harpenden	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hatfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Hednesford	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hereford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Herne Bay	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hitchin	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hoddesdon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Holt	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hunstanton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Huntingdon	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Isle of Wight	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Keighley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Kettering	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Kidderminster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
King's Lynn	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leighton-Buzzard	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Littlehampton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Liverpool	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Llandudno	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
London:								
12 m. radius	1/9	1/9	1/9	1/9*	1/9	1/9	1/8	1/4
12-15 m. radius	1/8½	1/8½	1/8½	1/8½*	1/8½	1/8½	1/7½	1/3½
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Lowestoft	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Macclesfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Malvern	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Mansfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Margate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Market Harb'rough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Matlock	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Melton Constable	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Melton Mowbray	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Merthyr Tydfil	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Middlesbrough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newark	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Newbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newcastle-ur-Lyme	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
New Forest	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newmarket	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newport, Mon.	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Nuneaton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Paignton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Peterborough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Pontypridd	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Preston	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ramsgate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Redcar	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Redditch	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Reigate	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Retford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ripon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rugby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Saffron Walden	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sawbridgeworth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Saxmundham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sevenoaks	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Sheffield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Sittingbourne	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southend-on-Sea	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
South Shields	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stevenage	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stoke-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stourbridge	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourport	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stowmarket	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Stratford-on-Avon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/0½
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swaffham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swindon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Tamworth	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Thetford	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Torquay	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Totnes	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Trowbridge	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Uttoxeter	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wallsend	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Warminster	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Warrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Warwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wells (Norfolk)	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Welwyn Gar. City	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
West Bromwich	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Weston-sup.-Mare	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Weymouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Whitby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wigan	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Winchester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wisbech	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Wolverhampton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Woodbridge	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worksop	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worthing	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wrexham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wroxham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Wymondham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

* The rate recognised by the National Association of Plasterers, Granolithic and Cement Workers, is 1/11½ per hour.

For Building Trade wages in Scotland see page 666

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor D.S.; Clerk, C.; Town Clerk T.C.; County Engineer, C.E.; County Surveyor. C.S.; County Architect, C.A.; Surveyor. S.; Engineer E.; Borough Architect, B.A.; Architect, A.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

APRIL 9.

Aylsham.—Cottages.—Cawston: Three or two pairs; Skeyton: Two or one pair, for R.D.C. E. R. Larner, S., 24, King's-rd., East Dereham. Dep. 10s.

Beeston.—Houses.—60 non-parlour, on site below Queen's-rd. and Alexandra-rd., for U.D.C. E. A. Bush, S. Dep. £2 2s.

Carryduff.—Barracks.—Standard type barrack, for Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegall-sq. West, Belfast. Dep. £1.

Clutton.—Cottages.—8 non-parlour, at Chew, Stoke, for R.D.C. Thomas & Morgan, architects, 23, Gelliwastad-rd., Pontypridd. Dep. £3 3s.

Deptford and Greenwich.—Dwellings.—Erection of a block at Hughes Fields estate (Watergate-st. area), Deptford and Greenwich, for the L.C.C. Architect to the Council, The County Hall (Room No. 3), Westminster-bridge, S.E.1. Dep. £2.

Glasgow.—School.—Temporary school at Kingsbridge-av., King's Park, for E.C. Education Offices (Property Department), 128, Bath-st. Dep. £2 2s.

Harrogate.—Houses.—58 two-bedroom, on housing estate off Devonshire-place; construction of roads and sewers in connection, for T.C. C. E. Rivers, B.E. and S.

Hove.—Houses.—Erection of 50, on the housing estate at The Knoll, Old Shoreham-rd., for the B.C. Borough Surveyor's Office, Town Hall, Hove. Dep. £3 3s.

Knaresborough.—Fencing.—Unclimbable wrought-iron fencing, at King James's Grammar school, for West Riding E.C. Education Officer, County Hall, Wakefield.

New Deer.—Shop.—Also restaurant. T. Scott Sutherland & Taylor, chartered architects and surveyors, 9, The Square, Huntly.

Purley.—Sports Pavilion.—Erection of, at the Higher Drive Recreation Ground, Higher Drive, Purley, for the U.D.C. Gilbert A. Ballard, O.B.E., A.M.I.C.E., Council Offices, 69, Brighton-road, Purley. Dep. £2 2s.

Solihull.—Dwellings.—6 non-parlour type, junction of Stratford and Aylesbury-rds., Hockley Heath, for R.D.C. J. A. Perry & Wilson, architects, County-buildings, 147, Corporation-st., Birmingham. Dep. £1 1s.

Staines.—Conversion Work.—Converting the Boys' Home into a Nurses' Home, at the Institution, London-rd., Ashford, Middlesex, for the Guardians of the Staines Union. J. H. Tyars, consulting architect, 28, Victoria-st., Westminster, S.W.1.

Stretford.—Houses.—264 at Barton-rd., for U.D.C. E. Worrall, S. Dep. £2 2s.

APRIL 8.

Bedford.—Building.—For (1) 3 cottages at Cardington; (2) alterations, repairs and decorations at Mill Farm, Cardington; and (3) alterations and additions, etc., at 3, Bereton-rd., for T.C. N. Greenshields, B.E. and S. Dep. £1 each.

Margate.—Bungalows.—6 or 12 bathing bungalows upon Westbrook Promenade, for T.C. E. A. Borg, B.E. and S., 40, Grosvenor-place.

Milton Regis.—Houses.—Erection of 92, on the Vicarage Orchard housing estate, for the Milton Regis U.D.C. A. W. Callaway, Surveyor, Town Hall, Milton Regis. Dep. £2 2s.

Portsmouth. — Sub-Stations. — At Lee-on-the-Solent and South Hayling, for Electricity Department. B. Handley, engineer and manager, Electricity Department, High-st.

Prescot.—Houses.—14, at east end of "The Wood," for U.D.C. P. A. Gregson, S., 2, West-st. Dep. £3 3s.

Romford.—Alterations and Additions.—To the Romford, London-rd. Elementary school, for the Essex C.C. E.C. Jno. Stuart, F.R.I.B.A., C.A., Springfield Old-court, Chelmsford. Dep £1 1s, to F. H. Owers, County Accountant, Duke-st., Chelmsford.

Twickenham.—Telephone Exchange.—Extension of "Popesgrove" Telephone Exchange, Twickenham, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Tynemouth.—Conveniences.—Bell-st. and Low Lights, North Shields, for C.B. B.S.

Wednesfield.—Houses.—92, near Amos-lane, for U.D.C. A. H. Lawrence, Council's Architect. Dep. £2.

APRIL 10.

Croydon.—Elementary Schools.—(1) Erection of elementary school at Lodge-rd.; (2) enlargement of an elementary school at Cooper-rd., for the Croydon E.C. Education Office, Katharine-st., Croydon. Dep. £1 in respect of each school.

Edlington.—Installation.—Of electric light at Edlington New Middle and Elementary schools and caretaker's house, for West Riding E.C. Education Officer, County Hall, Wakefield.

Glamorgan.—Improvements.—For (1) widening and improving Cardiff and Pontypridd main road at Taff's Well; (2) painting Brynsaddler bridge over River Ely at Brynsaddler; (3) painting Ffrwdwyllt bridge over River Ffrwdwyllt at Taibach; (4) painting Abercynon bridge over River Taff at Abercynon, for C.C. W. Gough Jenkins, Deputy-Clerk of C.C., Cardiff.

Hackney.—Conversion Work, Cleaning and Painting.—Conversion of two upper floors of the receiving wards into female officers' quarters and certain other work in connection therewith, internal cleaning and painting of the male and female receiving wards at the Central Institution, for the Hackney Union. E. W. Harbour, Clerk, 2, Sidney-rd., E.9.

Hull.—Lighting.—Electric light and bell installation at maternity home and infants' hospital, Hedon-rd., for T.C. D. Harvey, City Architect. Dep. £2 2s.

Leeds.—Painting.—Also cleaning Infectious Diseases Hospital, Seacroft, and Tuberculosis Sanatorium, Killingbeck, for T.C. Thos. Thornton, T.C.

Leicester.—Houses.—Erection of 251 and the adaptation of Rose Farm Cottage on the Braunstone Estate in six groups, for the Corporation. J. S. Fyfe, A.R.I.B.A., Housing Architect, Wyggeston House, 18, Highcross-st., Leicester. Dep. £2 2s.

London.—Telephone Exchange.—Erection of, at Castlebar (Perivale), Ealing, W., for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Ludlow.—Houses.—22, at Craven-arms, for R.D.C. Capt. S. N. Shrimpton, L.R.I.B.A., Knighton Rads. Dep. £3 3s.

Shardlow.—Painting.—Interior of block known as Infirmary, at Poor Law Institution, for B.G. Master of the Institution.

Southmolton.—Houses.—16, various parishes, for R.D.C. C. N. B. Willey, Joint Clerk to Council, 7, East-st. Dep. £2 2s.

Stoke-on-Trent.—Repairs.—To houses at Hanley, for T.C. F. B. Sharpley, T.C.

Uckfield.—Houses.—Erection of 12 non-parlour type in two blocks of six houses each in Selby-rd., for the U.D.C. A. Hollis, A.M.S.E., Surveyor, Public Hall, Uckfield. Dep. £1 1s.

West Riding.—Painting.—External painting of several buildings, tar painting, repair and surfacing of asphalt paths and courts, and pointing work, at Storthes Hall Mental Hospital, Kirkburton, near Huddersfield, for C.C. W. E. H. Burton, architect and engineer, West Riding Mental Hospitals Board Offices, Wakefield.

APRIL 11.

Farnworth.—Houses.—72, on Blindsill housing estate, for U.D.C. F. Ashton, E. and S. Dep. £2

Hull.—Painting.—Internal cleansing and painting of infectious diseases pavilions, Nos. 2, 3, and 4, Cottingham, for Corporation. D. Harvey, City Architect.

Manchester.—Greenhouse.—At Booth Hall Infirmary, Charlestown-rd., Blackley, for B.G. —. Hargreaves, Superintendent of Works, Union Offices, All Saints.

Manchester.—Shelter.—At Brookdale-park, for T.C. City Architect. Dep. £1 1s.

Plymouth.—Painting.—Interior of Greenbank Infirmary, including corridors, for B.G. W. H. Davy, Clerk, Poor Law Offices, Greenbank-rd.

APRIL 12.

Doune.—Houses.—Two blocks of four 3-apartment houses, for T.C. Simpson, M'Michael & Davidson, architects, Stirling. Dep. £1 1s.

Hertford.—Repairs.—Also decorations at Isolation Hospital, Gallows Hill, Hertford, for Hertford and Ware Joint Hospital Board. A. Gray, architect, 64, Duncombe-rd.

Keynsham.—Houses.—14 non-parlour and 2 parlour houses on Council's estate at Brislington, for R.D.C. H. W. Argile, Building Surveyor, 16, High-st. Dep. £1 1s.

London.—Demolition Work.—At the Letter Office Extension, Mount Pleasant, E.C., for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

APRIL 13.

Camelford.—Extensions.—Sunday School and extensions to Camelford Station United Methodist Church. J. Setchell, Newlands, Delabole.

Chapel-en-le-Frith.—Houses.—12 non-parlour, at Buxton-rd., Fernilee, to form dwelling houses and inspector and surveyor. Dep. £2 2s.

Edinburgh.—Reconstruction.—35-43, Grassmarket, and 1, Merchant-st., to form dwelling houses and hostel for women, for T.C. E. J. MacRae, A.R.I.B.A., City Architect.

Glasgow.—Painting.—Kingston District Library, for T.C. D. Stenhouse, T.C.

Ironbridge.—Building.—Building and civil engineering work in connection with construction of first section of power station at Buildwas, near Ironbridge, for West Midlands Joint Electricity Authority. E. F. Hetherington, Chief Engineer and Manager, Phoenix-buildings, Dudley-rd., Wolverhampton. Dep. £2 2s.

Keighley.—Building.—Two classrooms at School of Arts and Crafts, for West Riding E.C. and Keighley E.C. E. Ratcliffe, Director of Education Education Offices, Keighley.

Totnes.—Houses.—16 parlour and 19 non-parlour, on Road Field, Station-rd., for T.C. John L. Davies, B.E. and S. Dep. £2 2s.

APRIL 15.

Ardrossan. — Building. — Post Office, for H.M.O.W. Architect, H.M. Office of Works, 122, George-st., Edinburgh. Dep. £1 1s.

Ballater.—Painting.—Outside Albert and Victoria Halls. J. Stewart, secretary.

Bromley, Kent.—Buildings.—Erection of block for the accommodation of domestic staff at the Institution at Locksbottom, Farnborough. F. Danby Smith, F.R.I.B.A., Parliament-mansions, Victoria-st., Westminster, S.W.1. Dep. £2.

Leeds.—Painting.—For (a) external painting of several buildings; (b) tar painting, repair and surfacing of asphalt paths and courts, at Menston Mental Hospital, for West Riding Mental Hospitals Board. W. E. H. Burton, architect and engineer, West Riding Mental Hospital Board Offices, Wakefield.

Manchester.—Extensions.—Workshop and new coal store, at Barton Power Station, for T.C. H. C. Lamb, Chief Engineer and Manager, Electricity Department. Dep. £2 2s.

Sculcoates.—Houses.—22, on Council's housing sites at Anlaby and Kirkella, for R.D.C. W. E. Warburton, architect, 13, Bowlalley-la., Hull. Dep. £2.

Staines.—Cinema.—Erection of, at Staines, Middlesex, for the Majestic Theatres Corporation, Ltd. S. B. Pritlove, architect, 6, Sherwood-st., Piccadilly-circus, W.1. Dep. £3 3s.

Tranent.—School.—R.C. school, for East Lothian E.C. R. & A. K. Smith, surveyors, 4, Forres-st., Edinburgh.

APRIL 16.

Brighton. — Altering, Repairing, etc. — Boy's, girls' and infants' w.c., etc., at the Warren Farm Schools, Brighton, for the Guardians of the Brighton Parish. E. Wallis Long, architect, 6, Old Steine, Brighton.

Kirkby Lonsdale.—Houses.—2 pair parlour, and 4 pair non-parlour, for U.D.C. W. E. R. Thomas, S. Dep. £1 1s.

Leeds.—Schools.—New secondary schools for Far Headingley, for 1,200 pupils, for E.C. Education Department (Architect's Section), Calverley-st. Dep. £2 2s.

Limerick.—Church.—At St. Mary's, for Revd. Hannan, P.P. Ashlin & Coleman, architects, 7, Dawson-st., Dublin. Dep. £3 3s.

Llantarnam.—Houses.—20, Cocker-av., Cwmbran, for U.D.C. S. Dep. £2 2s.

Sligo.—Houses.—28, at Cleveragh, for Corporation. J. P. Quinn, B.S. Dep. £2 2s.

APRIL 17.

***Hendon and Sutton.**—Building Work, etc.—(a) New recreation hall, Colindale Hospital, Hendon; (b) alterations to boiler house, Downs Hospital, Sutton, Surrey, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Dep. £1 in respect of each work.

***Various Places.**—Cleaning and Painting.—At various hospitals, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Dep. £1 in respect of each work.

APRIL 18.

Birmingham.—Installation.—Call lighting system at Dudley-rd. Hospital, for B.G. C. P. Beech, clerk, Union Offices, Edmund-st.

Greenwich.—Laundry Additions.—Erecting a small addition to the laundry depot at the Greenwich and Deptford Hospital, Vanbrugh-hill, for the Guardians of the Greenwich Union. Alfred Roberts, F.R.I.B.A., 92, London-st., Greenwich, S.E.10. Dep. £2.

London.—Painting.—Cleaning and repainting Station buildings, etc., at Monmouth, Usk, etc., and Colwall, Ledbury, etc., for G.W.R. F. R. E Davis, secretary, Paddington Station, W.2.

Meath.—School.—Technical school, Bective-st., for Kells U.D.C. M. Grace, Oldcastle. Dep £3 3s.

APRIL 19.

***Bristol.**—Building Works.—Alterations and additions to (1) Kingswood P.O., etc., and erection of new telephone exchanges at (2) Bedminster; (3) Easton; (4) Cheltenham-rd., for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s. in each case.

Rotherham.—Houses.—12, off Morthan-rd., Wickersley, for R.D.C. C. O. Rawstron, E. and S. Dep. £2 2s.

APRIL 20.

Bentley.—Building.—Police Station, for West Riding C.C. P. O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

Stoke-on-Trent.—Extensions.—At the North Staffordshire Technical College, Stoke-on-Trent, comprising laboratories, mine machinery and advanced science rooms, classrooms, etc. The Clerk to the Governors, Town Hall, Hanley, Stoke-on-Trent. Dep. £6 6s.

APRIL 22.

Ashborne.—Houses.—22 non-parlour, for U.D.C. D. Powell, S.

***Chertsey.**—Cottages, Drainage, etc.—Erection of 50 cottages (25 pairs), formation of drainage, fences, etc., on the Housing Estate near Station-rd., Addlestone, for the U.D.C. Ernest J. Castle, Clerk, Council Offices, Chertsey. Dep. £1 1s.

***Southwick.**—Transformer House.—Construction of foundation works and building for a transformer house at Southwick generating station near Brighton, for the Central Electricity Board. Richard H. Fox, Sec., Trafalgar buildings, 1, Charing Cross, W.C.2. Dep. £2 2s. first copy and £1 1s. for each subsequent copy.

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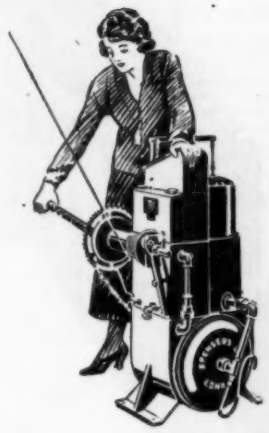

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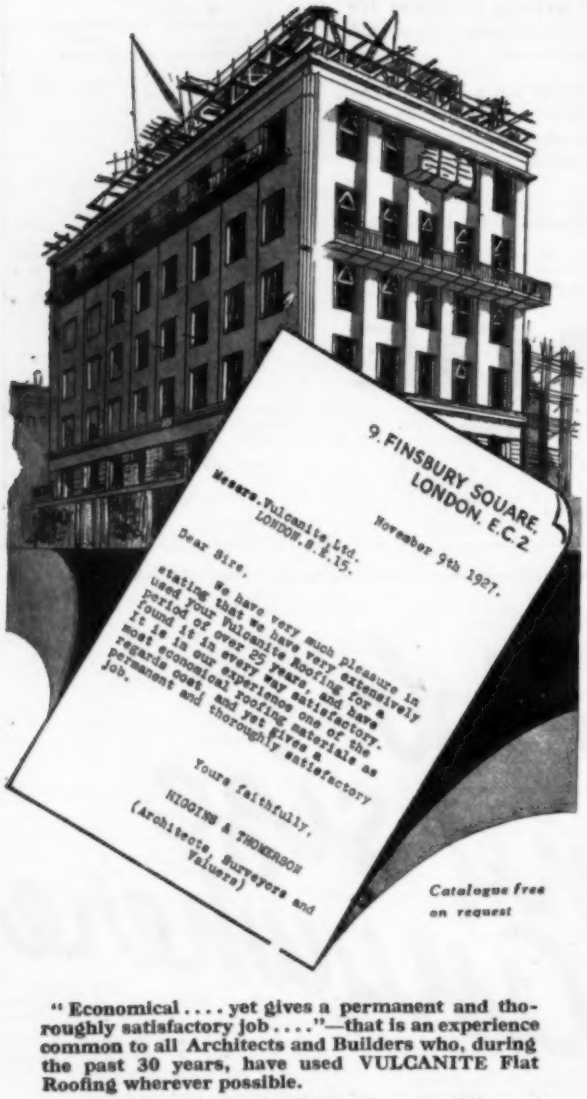
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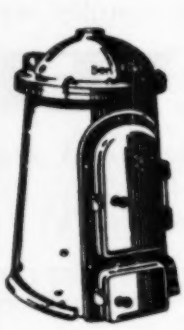

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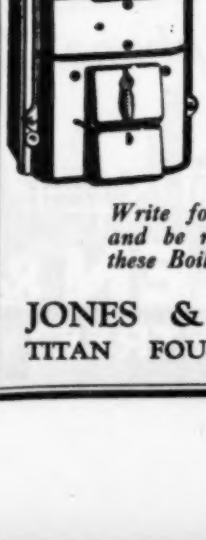

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For inserting in the sides or ends of greenhouses. The heating surface being thus utilised within the house, whilst the stoking doors and smoke pipe project outside. Neat, economical and thoroughly efficient.

Write for our Boiler Section and be ready to specify one of these Boilers for your next job.

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APRIL 23.

***Middlesbrough.**—Post Office.—Erection of, at Haverton Hill, Middlesbrough, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

***Middlesex.**—Decorative and Other Works.—At the Institution at Isleworth and elsewhere, for the Brentford Union. F. E. Harmsworth, clerk, Toolands House, 34, Twickenham-rd., Isleworth, Middlesex.

Sudbury.—Houses.—39, on Wents estate, for T.C. F. P. Earee, L.R.I.B.A., 36, Market-hill. Dep. £2 2s.

APRIL 26.

***Hornsey.**—Pile Foundations.—Construction of a piled sub-structure for the electricity sub-station at Oakfield-rd., Stroud Green, N.4, for the Hornsey T.C. W. H. Adams, B.E. and S., Town Hall, Southwood-lane, Highgate, N.6.

Reigate.—Houses.—Erection of 7 blocks of 4 non-parlour houses in Philanthropic-rd., Earlswood, Redhill, for the Reigate B.C. Fred. T. Clayton, B.S., Municipal Buildings, Reigate. Dep. £3 3s.

APRIL 30.

Caven.—Additions.—Also alterations to surgical hospital, for Cavan County Board of Health and Public Assistance. T. F. Brady, secretary, Board-room, County Home, Cavan. Dep. £5 5s.

NO DATE.

Cudworth. — Painting. — Also decorating and papering West End Club. J. R. Jarman, secretary.

Exeter.—Enlargement.—Also remodelling laundry at Royal Devon and Exeter Hospital, for Committee. A. C Harbottle, architect, County-chambers, Exeter.

Inch (Wexford).—Buildings.—For Inch Co-operative Dairy Society, Ltd. Creamery Office.

Rochdale.—Additions.—Also alterations to Milnrow Working Men's Club, Dale-st. J. Hayhurst, architect and surveyor, 32, Richmond-ter., Blackburn. Dep. £2 2s.

Tiverton.—Demolition.—Clearance of certain building materials and structural steelwork after fire at New Hall, Constitutional Club. Dixon & Bamson, architects.

MATERIALS, etc.

APRIL 8.

Headington.—Granite, etc.—For R.D.C. A. Walker, S., Hillcrest, Windmill-rd.

Westhoughton.—Road Materials.—For U.D.C. G. Hayes, S.

APRIL 9.

Glasgow.—Builders' Materials.—For Sewage Department. Manager, 50, John-st.

APRIL 10.

Sexhill.—Stone.—For T.C. G. Ball, B.S.

Sexhill.—Tar.—For T.C. G. Ball, B.S.

Glasgow.—Plumbers' Materials.—For Baths and Wash-houses Department. General Manager, 38, College-st.

Heston and Isleworth.—Broken Granite, etc.—For U.D.C. J. G. Carey, S.

Isle of Man.—Tar, etc.—For Highway Board. R. H. Cubbin, secretary, 21a, Athol-st., Douglas.

APRIL 12.

Huyton-with-Roby.—Macadam, etc.—For U.D.C. H. Finister, S.

Madras.—Pipes, etc.—15,900 ft. of cast-iron pipes, special castings, sluice valves, etc., ranging in diameter from 12 in to 27 in., for Corporation. J. Mansergh & Sons, agents to Corporation of Madras, India, 5, Victoria-st., Westminster, S.W.1.

APRIL 13.

Dunstable.—Highway Material, etc.—For T.C. Wm. F. Wilkins, B.S.

Edinburgh.—Builders' Materials.—For P.C. W. M. Mowat, clerk, Parish Council-chambers, Castle-ter.

Prestwich.—Building Materials.—For U.D.C. M. A. Piercy, S.

Prestwich.—Granite, etc.—For U.D.C. M. A. Piercy, S.

Romford.—Tar, etc.—For R.D.C. Highway S., 16a, South-st.

Worthing.—Pipes.—3,600 yds. of 7-in. socket and Spigot cast-iron or spun-iron pipes, and specials, for T.C. Borough Water Engineer.

APRIL 15.

Loughton.—Limestone, etc.—For U.D.C. H. White, S.

Sudbury.—Road Materials.—For T.C. R. G. Coles, B.S.

APRIL 16.

Sowerby.—Road Materials.—For U.D.C. J. Eastwood S.

APRIL 17.

Hull.—Paving.—300,000 paving blocks, for T.C. T. Thomas, City E.

London.—Building Materials.—For G.W.R. F. R. E. Davis, Secretary, Paddington Station.

Motherwell and Wishaw.—Road Materials.—For T.C. B.E.

NO DATE.

Weston-super-Mare.—Builders' Materials.—For U.D.C. H. A. Brown, E. and S.

ENGINEERING, IRON AND STEEL

APRIL 8.

Barry.—Reservoir.—Concrete service reservoir, together with short lengths of cast-iron pipes, for U.D.C. E. Sandeman, consulting engineer, 15, Victoria-st., S.W.1. Dep. £5 5s.

Hornsea.—Wall.—Sea wall, esplanade, road and three groynes, for U.D.C. Lewis & Lewis, engineers, 15, Victoria-st., Westminster, S.W.1.

Melbourne.—Towers.—Galvanised steel transmission line towers, for State Electricity Commissioners of Victoria. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 7401.)

St. Andrews.—Water Works.—Four primary and four secondary gravitation filters and relative works at Upper Pipeland, for T.C. W. Watson, Water Engineer. Dep. £2.

APRIL 9.

Sutton-in-Ashfield.—Weir.—Concrete overflow weir 100 ft. long, and other works of repair at King's Mill reservoir, for U.D.C. F. W. Hodson, consulting engineer, Bank-chambers, Loughborough Dep. £3 3s.

APRIL 11.

Guernsey.—Filter Beds.—For States of Guernsey Water Board. T. & C. Hawksley, civil engineers, 34, Old Queen-st., S.W.1. Dep. £3 3s.

Stokesley. — Reconstruction. — Of Easby-lane bridge, for R.D.C. H. Lee, Highway S.

Stokesley.—Reconstruction.—Little Broughton bridge, for R.D.C. H. Lee, Highway S.

APRIL 13.

Chapel-en-le-Frith.—Reservoir.—Service reservoir, together with valves, fittings, etc., for R.D.C. Brady & Partington, engineers, Market-st. Dep. £5.

Rainworth.—Widening.—In reinforced concrete, of bridge over Rainworth Water on Mansfield, Southwell and Sleaford-rd., for Notts C.C. J. Cracroft Haller, C.S. Dep. £2.

APRIL 15.

Braintree.—Sewerage.—Provision and laying of about four miles of sewers, consisting of glazed stoneware and cast-iron pipes, varying in diameter from 15 in. to 6 in., together with storm overflow chambers, manholes, flushing chambers, and other appurtenant works, in parishes of Kelvedon and Feering, for R.D.C. J. D. Haworth, consulting engineer, 3, Central-buildings, S.W.1. Dep. £5.

Macclesfield.—Sewerage.—Extensions at Poynton-with-Worth sewage disposal, for R.D.C. Parker Pearson & Ross Hooper, engineers, Dallas-chambers, Chippenham. Dep. £5.

APRIL 16.

Kilkenny.—Drainage.—Construction of septic tanks and outfall, with 1,000 yds. of 21 in. dia., intercepting sewer, syphon pipe under River Nore, with about 2,000 yds. of 18 in., 15 in. and 12 in. main sewers and 4,000 yds. of 9 in. local sewers and house connections, manholes, vent shafts, etc., for U.D.C. Pierce F. Purcell, consulting engineer, Ashton, Killiney, Co. Dublin. Dep. £10.

Reading.—Sewerage.—Sewage disposal works at Manor Farm, for C.B. B.S. Dep. £2 2s.

Tipperary.—Reconstruction.—Of Aileen-bridge, on Tipperary-Dundrum main road, for South Riding C.C. T. P. Meade, C.S., Clonmel. Dep. £5.

APRIL 17.

Cardiff.—Reconstruction.—Of bridge, consisting of four spans of 47 ft. 6 in. each, by 70 ft. wide, over River Taff, in lieu of the existing bridge, which is to be demolished to the level of the tops of the existing abutments and piers, for T.C. City E. Dep. £3 3s.

Near Birmingham.—Reconstruction.—Together with widening and improvement of approaches of Hopwood Canal Bridge, for Worcestershire C.C. C.S., 30, Foregate-st., Worcester. Dep. £2 2s.

APRIL 18.

Culham.—Reconstruction.—Of part of Nuneham viaduct over River Thames near Culham Station, for G.W.R. Engineer at Paddington Station, W.2. Dep. £2 2s.

Nenagh.—Extension.—Of water supply, for U.D.C. S. T. O'Neill, T.C. Dep. £5 5s.

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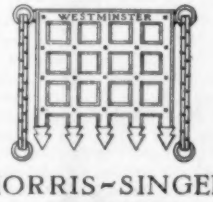

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APRIL 19.

Dublin.—Bridge.—Reinforced concrete girder bridge, of 38 ft. clear span, at Glasnevin, for C.B. G. J. Sherlock, T.C.

APRIL 25.

Johannesburg.—Bridgework.—For South African Railways and Harbours. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 7623.)

ROAD, SEWERAGE, AND WATER WORKS

APRIL 8.

Aberdeen.—Sewer.—Laying of 105 lin. yds. of / in. diam. pipe sewer, with relative works, at Kincardine O'Neil, for C.C. Jenkins & Marr, C.E., 16, Bridge-st., Aberdeen.

Barrow-upon-Soar.—Roads.—Strengthening and resurfacing with bituminous macadam approximately 2.1 miles of roads, for R.D.C. J. B. Lund, Highway S., Union-buildings, Mountsorrel, near Loughborough.

Blaby.—Drainage.—1,100 yds. of 9 in. pipe sewers, together with manholes, and other works, in Glen Parva, for R.D.C. Pick, Everard, Keay & Gimson, engineers, 6, Millstone-lane, Leicester.

Bisan.—Making-up.—Beaconsfield-rd., for R.D.C. F. A. Ward, S. and E. Dep. £1.

Bognor.—Tar-spraying.—About 105,000 sq. yds. of road surface, for U.D.C. J. Draper, S., High-st.

Essex.—Mains.—Laying and jointing of 3,757 lin. yds. of 20 in. main, together with connections and contingent works, from Woodford pumping station to point near Buckhurst Hill reservoir, for M.W.B. G. F. Stringer, clerk, 173, Rosebery-av., E.C.1. Dep. £10

London.—Paving.—Forming and paving portion Cresswell-park, Blackheath, for Greenwich B.C. B.E. and S.

Welwyn Garden City.—Surface Dressing.—Spraying with hot bituminous dressing about 98,000 super yds, of road surface, for U.D.C. Capt. W. E. James, S.

APRIL 9.

Dundee.—Laying and finishing with bituminous carpet surface of Arbroath-rd., between Dalkeith-rd. and Eastern Necropolis, for Corporation. G. Baxter, City E.

Perth.—Reconstruction.—Of Viewlands-rd. and Oakbank-rd., for T.C. Thomas M'Laren, City Engineer, 16, Tay-st. Dep. £1.

Sutton.—Sewer.—Laying of 200 yds. of earthenware pipe sewer in by-pass road to Lymbourne-close, for Sutton and Cheam U.D.C. W. H. Grieves, S. Dep. £1 1s.

Yeadon.—Sewer.—1,050 lin. yds. of 18 in. and 21 in. diameter concrete tubes, together with manholes, storm overflow, etc., for U.D.C. Arnold Brookshank, engineer, 14, The Exchange, Bradford. Dep. £2 2s.

APRIL 10.

Bolton.—Main.—Laying with pipes, line of 12, 10, and 9 in. water pipes, about 1,810 yds. in length and execution of other works in connection therewith, at Belmont, near Bolton, for C.B. Waterworks Engineer's Office, St. George's-st. Dep. £2 2s.

Chiswick.—Water Sewers.—Construction of 9 in. surface water sewers in Grove Park, for the Brentford and Chiswick U.D.C. Edward Willis, M.Inst.C.E., F.S.I., Town Hall, Chiswick, W.4.

Coulsdon and Purley.—Sewers.—Storm water and soil sewers in portion of main Brighton-rd., between Purley tram terminus and Marlpit-lane, Coulsdon, for U.D.C. G. A. Ballard, S. Dep. £5 5s.

Easingwold.—Spraying.—Tar spraying approximately 200,000 super. yds., for R.D.C. H. H. Furnass, District S.

Heston and Isleworth.—Improvements.—Of Kingsley-rd. J. G. Carey, E. and S. Dep. £2 2s

Inverness-shire.—Pipes.—2,000 lin. yds. of cast-iron piping of 4 and 3 in. diam., including valves, connections, and other relative works, at Nethybridge, for C.C. A. Grant, Inverness.

Mablethorpe and Sutton.—Roads.—24,000 sq. yds of highways, for U.D.C. R. W. Maughan, E. and S.

Merton and Morden.—Improvements.—(1) Widening Coombe-lane (2) 12 in. sewer, Cannon Hill-lane; (3) 18 in. surface water sewer, High-path, etc., for U.D.C. G. Jerram, E. and S. Dep. £1 each.

Newbury.—Resurfacing.—Resurfacing, channelling, kerbing, and surface-water sewering works in certain roads, for T.C. B.E. and S.

Wrexham.—Street.—Also widening of Bennions-lane, Huntroyde estate, for T.C. J. England, B.E. Dep. £1 1s.

APRIL 11.

Aberdeen.—Sewers.—Fireclay pipe sewers at Hilton-st. and Wellbrae-ter., for T.C. F. Henderson, B.S. Dep. £1 1.

Larne.—Extension.—Extension of Woodburn water main by supplying and laying 257 yds. 4 in. cast-iron pipes, with necessary fountains, hydrants, etc., for R.D.C. S. Robinson, engineer, Victoria-st.

London.—Paving.—Providing and laying bituminous surfacing material, etc., in Fulham-rd.—Arthur-st. to Sydney-place; Ladbroke-grove—Great Western Railway Bridge to Kensal-rd.; Vicarage-gate—opposite Inverness-gardens at junction with Brunswick-gardens; Addison-rd.—Kensington-rd. to south-west section of Addison-crescent; and Marloes-rd.—Scarsdale-villas to Cromwell-rd., for Kensington B.C. B.E.

London.—Paving.—With asphalt and other works incidental to making-up of passageway or road at rear of 40-49, Addison-rd., and leading from Napier-rd. to Holland-mews (about 370 ft. in length), and also paving with tarmacadam and for other works incidental to making-up of street or way between 160 and 162, Warwick-rd., and connecting that thoroughfare with Warwick-gardens, for Kensington B.C. B.E.

Wilts.—Reconstruction.—Realigning, strengthening and surfacing with asphalt and asphaltic macadam a total length of approximately 10 miles of main road, for C.C. H. S. Ganderton, C.S., Trowbridge. Dep. £5.

APRIL 12.

Formby.—Road.—Also sewer works in Argarmeols-rd., for U.D.C. E. Kendrick Gollan, E. and S.

Huyton-with-Roby.—Surface Spraying.—Approximately 37,000 super yds. of highways, for U.D.C. H. Finister, S.

Keynsham.—Sewer.—233 yds. of 9 in. sewer, including manholes and incidental works, in main Bristol-Bath-rd., Brislington, for R.D.C. H. W. Argile, building surveyor. Dep. £1 1s.

APRIL 15.

Chelmsford.—Extensions.—1,060 yds. lin. of 7 in. stoneware sewer, with manholes and other works, at Broomfield, for R.D.C. Lemon & Blizard, engineers, 9, Victoria-st., Westminster. Dep. £2 2s.

Chelmsford.—Extension.—(a) 420 yds. of 7 in. and 8 in. stoneware sewer, and works incidental thereto, and (b) 260 yds. of 6 in. road surface water drain, at Writtle, for R.D.C. J. Dewhirst, E., Waterloo-lane Dep. £1.

Chiswick.—Road Widening, etc.—Widening and reconstruction of Lionel-rd., Brentford, from Popes-lane to the Great West-rd., for the Brentford and Chiswick U.D.C. Edward Willis, M.Inst.C.E., F.S.I., Engineer and Surveyor, Town Hall, Chiswick, W.4.

Dunstable.—Paving.—Also surfacing Blows-rd., Borough-rd., Downs-rd., Grove-rd., Park-rd., and Capron-rd., for T.C. W. F. Wilkins, B.S.

London.—Paving.—2 in. mastic asphalt paving on reinforced concrete foundations in Half Moon-lane (part of), and Village-way, for Camberwell B.C. W. Bell, B.E. and S.

Sandwich.—Mains.—Materials and laying and jointing 6 in. diam. water mains, with necessary sluice valves, hydrants, specials, etc., for T.C. Wm. R. Moultrie, Acting Waterworks Manager, The Barbican. Dep. £4.

APRIL 17.

Tavistock.—Main.—Laying water main and another work in connection with water supply for Walkhampton, for R.D.C. T. H. Harris, Sanitary Inspector.

APRIL 18.

Blackwell.—Water Supply.—4,186 lin. yds. cast-iron mains, together with connections and contingent works, for R.D.C. A. H. Elliott, engineer, Gilcroft-chambers, Church-lane, Mansfield. Dep. £2 2s.

Weymouth. — Making-up. — Victoria-rd., Wyke Regis, for T.C. G. G. H. Symes, clerk, 9, East-st.

APRIL 20.

South Stoneham.—Improvements.—Of West End-rd., West End, near Southampton, for R.D.C. W. R. Cowell, S. Dep. £2 2s.

APRIL 22.

London.—Reconstruction.—Of tramways, Whitechapel High-st., for L.C.C. Chief Engineer, Old County Hall, Spring Gardens, S.W.1. Dep. £5.

Auction Sales, Tenders, etc.

APRIL 9.

London.—Knight, Frank & Rutley will sell (unless previously sold privately), in the Hanover-sq. Estate Room, the Freehold Wickham Hall Estate, West Wickham, Kent, with vacant possession on completion of the purchase. Auctioneers, 20 Hanover-sq., W.1.

APRIL 23.

London.—Henry Butcher, Hall & Co. will sell by order of Messrs. Farmer & Brindley, Ltd. (who are retiring from business) on the premises, 63, Westminster Bridge-rd., S.E.1, stone and marble working machinery, woodworking machinery, miscellaneous plant, etc. Auctioneers, 63 and 64, Chancery-lane, London, W.C.2.

MAY 9.

***London**—Hillier, Parker, May & Rowden will sell, at the London Auction Mart, 155, Queen Victoria-st., E.C.4, building land, the freehold, Belmont Estate, 106 acres, Mill Hill and Totteridge. Auctioneers, 27, Maddox-st., W.1.

Public Appointments

APRIL 8.

Westminster.—Clerk of Works required in connection with the proposed erection of public baths and washhouses, etc., by the Westminster City Council. A. W. S. & K. M. B. Cross, architects, 45 and 46, New Bond-st., W.1.

APRIL 10.

Barnet.—Clerk of Works required for small nurses' home for about 5 months by the Isolation Hospital Committee, Barnet, Herts. The Clerk.

Lewisham.—Clerk of Works required by the Lewisham B.C. in the Borough Surveyor's Department. John W. Shuter, T.C., Town Hall, Catford, S.E.6.

APRIL 15.

***Chiswick.**—Junior Engineering Assistant required by the Brentford and Chiswick U.D.C. Edward Willis, M.Inst.C.E., F.S.I., Engineer and Surveyor, Town Hall, Chiswick, W.4.

APRIL 16.

***Ipswich.**—(1) Travelling Clerk of Works (permanent appointment), (2) Architectural Assistant (temporary appointment), required in the County Architect's Dept. by the East Suffolk C.C. Cecil Oakes, clerk, County Hall, Ipswich, Suffolk.

APRIL 18.

***London.**—Temporary Assistant Quantity Surveyors, on the staff of the Miners' Welfare Committee, required by the Secretary of Mines, Under-Secretary for Mines, Establishment Branch, Miner Dept., Dean Stanley-st., S.W.1.

APRIL 19.

***Southgate.**—Engineering Draughtsman required in the office of the Surveyor by the Southgate U.D.C. A. E. Lauder, clerk, Southgate Town Hall, Palmer's Green, N.13.

APRIL 20.

***Middlesex.**—Headmaster required by the Middlesex E.C. at the Tottenham Technical (Building) School, as from June 1, 1929. H. M. Walton, secretary, Edu. Offices, 40, Eccleston-sq., S.W.1.

MAY 22.

London — Forthcoming Examination. — Male Cartographers in the Hydrographic Department of the Admiralty. The Secretary, Civil Service Commission, Burlington-gardens, W.1.

BOOK REVIEWS

The Return to "Laisser Faire." By Ernest J. P. Benn. (London: Ernest Benn, Ltd.) 6s. net.

There is, as the author states, nothing very new about this book; it is, in fact, a new statement of an old truth, concerning our rights and our duties as individuals. In short, the main contention is that a State is being erected whose sole object is to act as a wet nurse to the people, while individualism says that the State cannot find employment for anybody unless everybody makes a resolute effort to find work for himself, relying on the State only in the last resort. The book might be described as non-political, except that the whole theory of individualism is opposed throughout to the collective political theory of Socialism. Where the political idea has entered, where political action and collectivist theory have been applied, there is want, shortage and poverty. In this connection he instances houses, coal and employment, in which the politician has interfered and landed us in disaster. The conclusion is that political control must be confined to political purposes, and that our material well-being, our economic health, our wealth-making, must be left to the free play of economic forces, through which alone the public can secure any guarantee of service or supply. This theory undoubtedly is gaining many adherents, as a result of our post-war failure to resume normal trading conditions. It is an elaboration of the opinion expressed by the Prime Minister at Bewdley: "We are unlearning the war-time habit of looking to the Government to do everything for us."

The author devotes a chapter of his book to housing, a subject which gives him ample scope for illustrating the failures caused by mixing and muddling ethical considerations with economic laws. We can agree with his contention that the building trade is a protected trade, and that there is almost a total absence of foreign competition (apart from materials) in connection with building. "The building trade," he says, "furnishes perhaps our best example of the folly of a policy of restriction. . . . It has been organised into a position where production is always behind consumption, and where, if at any time there is the merest sign of a surplus of production, something is supposed to be wrong." It cannot be denied that the workers in the building trade have succeeded in limiting the building market so seriously as to affect most of us in the matter of houses. That this policy may have serious consequences eventually for the building trade we are quite prepared to believe; but the author, who is not looking for excuses, makes no attempt to explain that the independent attitude of the building trade is largely, if not wholly, the result of the Rent Restriction Act. The most superficial examination of the prevailing conditions makes it clear that the law of supply and demand also operates through the Rent Act, and is both the building trade excuse and the opportunity. Nevertheless, one fully realises that any defence of the action of the building trade merely proves the author's indictment of Government or collectivist control, and supports his plea for individualism.

He may have overstated his case, and understated the whole case for Socialism; but he has undoubtedly written a very entertaining book, which should be read by everyone who takes an intelligent interest in the welfare of the country.

"Laxton and Lockwood."*

The 112th (1929) edition of this very useful price book is just issued. Its various features are too well known to need special mention, but the publishers emphasise the fact that all the information contained in this edition has been subjected to the most thorough revision and correction. As in previous editions, the prices in general apply to London, but sufficient details are given in the analyses, tables and memoranda, under the various trade headings and elsewhere, to enable the book to be used in the provinces equally as well as in London. The current rates of wages in the building trades through England and Wales are also given.

The alphabetical list of Specialities and Proprietary Articles and Brands (some 10,000 in all) has again received careful attention, and some 35 pages have been added. The name and address (and in most cases the telegraphic address and telephone number) of the manufacturer of each article are given in each instance.

The Concrete Year Book.†

This Year Book has again been thoroughly revised and much new matter added, and it now comprises 640 pages, divided into Handbook, Directory, and Catalogue Sections. The Handbook Section contains chapters on practically every aspect of reinforced concrete design and construction, and includes: Notes on methods of securing strong concrete of uniform strength, water content, coloured cement, storage of cement, etc.; tables for the design of slabs for various spans and loadings; tables showing loads carried by joist-concrete floors for various sections of joists over various spans; specifications and designs for concrete and reinforced concrete floors; specifications for granolithic floors; specifications for concrete products and cast-stone, with drawings of moulds; specifications for concrete roads; complete memoranda of everyday use to the concrete user; bibliography of concrete and allied subjects.

The Directory Section includes complete lists of reinforced concrete designers, contractors, etc., and suppliers of aggregate, cement, concrete products, cast-stone, machinery and plant, and all materials used in the concrete and allied trades, with a complete list of trade names and brands. The Catalogue Section contains full particulars of the business or products of over 300 firms connected with or catering for the concrete industry.

Proposed Rebuilding at Smith-square, S.W.

The British American Tobacco Co., Ltd., have accepted the tender of Messrs. William Downs, Ltd., 12, Hampton-street, S.E.17, for the rebuilding of the premises at No. 10 as new offices for the company. The plans have been prepared by Messrs. Gordon & Gordon, architects, Finsbury House, Blomfield-street, E.C.2. The quantities have been completed by Mr. Sydney Gordon, F.S.I., Finsbury House, Blomfield-street, E.C.2. The cost will exceed £100,000.

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* Laxton's and Lockwood's Builders' Price Book. (112th Edition.) London: Kelly's Directories, Ltd., 186, Strand, W.C.2. Price 7s. 6d. net, post free.

† "The Concrete Year Book, 1929." By Oscar Faber, O.B.E., D.Sc., M.Inst.C.E., and H. L. Childe. London: Concrete Publications, Ltd., 20, Dartmouth-street, S.W.1. 640 pp. Price 3s. 6d. net.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians, B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education, M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E. Borough Architect, B.A.; Architect, A.

Amersham.—R.D.C. propose to purchase a £150 site adjoining Memorial Hall, for 8 houses. Also are seeking site for houses in Little Missenden.

Ashton-under-Lyne.—Trustees of St. Peter's Church proposing conversion Victoria-st. day schools into senior mixed school, at £500.

Barrowford.—Parochial Council of St. Thomas's Church propose repairs to tower and roof of church.

Beddington.—U.D.C. approved: The Chase, 6 houses, W. Bradfield; Upper-rd., 8 houses, A. Oliver; Buckingham-way, 4 houses, H. T. Perryman.

Belfast.—£31,000 be spent on public elementary school in Blythe.

Blackpool.—B.S. been asked prepare plans extension Fire Station on site between Central Police Station and Albert-rd.

Blaydon-on-Tyne.—Board of Management of Blaydon Ryton & Whickham Joint Isolation Hospital, Normans Riding, proposing extensions, at £5,000. W. Crooks, architect, 42, Tyne-st.

Bolton.—T.C. approved: T. P. Smith, 12 houses, Brook Hey-av.; M. Welch, 4 houses, Grendon-st.; W. E. Yates, 12 houses, Thorns-rd.; J. England & Son, 13 houses, Doffcocker estate, off Moorside-av., and 10 houses, Moorside-av.; J. E. Paiton, 5 houses, St. Aubin's-rd.; Leigh Brothers, Ltd., 6 houses, Longford-av.; A. Coward, 4 houses, Danesbury-rd.; E. Howarth, 9 houses, St. Helens-rd.; Bleakley & Wesley, 9 houses, Calder-rd.; N. O. Halliwell, 8 houses, Barcroft-rd.

Brentford.—Middlesex C.C. under consideration reconstruction Police Court, at £12,000.

Bridlington.—T.C. approved: C. L. Waite, 16 houses, new road, St. Aidan-rd., J. E. Wray & Son.

Brighton.—Arrangements are being made for the extension at an early date of the Brighton Public Library, Museum and Art Galleries.

Carshalton.—U.D.C. passed plans: 48 houses, Sunnymede-av., for A. E. Wilkinson, Ltd.; amended lay-out of 14 semi-detached houses, Woodmansterne-rd., in lieu of detached houses, for the Lowry Estates, Ltd., and 10 houses, Vincent-av. for V. Shire.

Chapel-en-le-Frith.—Trustees Wesleyan Chapel carry out extensions to Wesleyan Schools, Townend. Plans by T. Partington, Market-st.

Coventry.—A. Hoare, L.R.I.B.A., 28, Trinity Churchyard, preparing plans additions Council School, Stoke, for E.C.

Coventry.—T.C. approved: Alterations and additions, "Whitefriar Inn," Much Park-st. and Whitefriars-st., for W. J. Lynch; 16 houses, Christchurch-rd., E. J. Sutton; 8 houses, Moat-av., P. S. Burden & Co., Ltd.; 12 houses, Christchurch-rd., A. E. White; alterations and additions to "Rose and Woodbine" public-house, North-st. and Milton-st., for Northampton Brewery Co., Ltd.; 4 houses, Nunt's-lane, H. G. Adams; 12 houses, Nunt's-lane, W. R. Lane; 4 houses, Wainbody-av., J. Claridge; 4 houses, Moat-av., J. Aston; 4 houses, Shakespeare-st., J. B. Harvey; 76 houses, Holborn-av., Holbrook Building estate, Kelley & Son; 4 houses, Moat-av., A. E. Taylor; 4 houses, Butt-lane, Allesley, Gazey Bros.; 4 houses, Moat-av., C. E. Salt; extensions to sub-station and alteration to petrol pump and tank, Holbrook-lane, Dunlop Rubber Co., Ltd.; offices, Harnall-lane East, for Corporation Transport Committee; 4 houses, Beanfield-av., G. Webb; 2 houses, Grange-rd., J. E. Hackett; 4 houses, Alderman's Green-rd., Dobbs & Pegg; 10 houses, Beanfield-av., C. A. Anelay & Son; 4 houses, Kenpas-rd., A. Barratt; 6 houses, Fir Tree-av., J. H. Bee; 6 houses, Fir Tree-av., H. G. Weller; licensed premises, Kenpas-rd. and Wainbody-av., Bass, Ratcliff & Gretton, Ltd.; 4 houses, Elm Tree-av., H. J. Dalton.

Dagenham.—U.D.C. approved: 25 houses, Cecil-rd., Chadwell Heath, 18 houses Eric-rd., Chadwell Heath, for St. Chad's Estate Co., Ltd.; 8 houses, Essex-rd., Dagenham, G. Mitchell & Sons; store at Sterling Works, Dagenham, for Sterling Telephone and Electric Co., Ltd.; sports pavilion on Vicarage Field, Dagenham, Union Cable Co., Ltd.; re-building of "Cherry Tree" beer-house, Wood-lane, Becontree; 24 houses, High-rd., Chadwell Heath, F. E. Fawcett.

Dublin.—Plans passed, H. T. O'Rourke, City Architect: 5 to 8, Upper Dominick-st., store, T. C. McCormick; Cabra-rd., four houses, D. Caulfield; Harcourt-st., gymnasium, the High School.

Dudley.—A. Butler, F.R.I.B.A., architect, 31, Priory-st., preparing plans additions at Guest Hospital. Cost, £80,000.

East Barnet.—U.D.C. approved: 12 houses in Dinsdale-gardens, Greenhill Park, for W. C. Leak & Sons; 27 shops with flats over at corner of Station-rd. and Great North-rd., for C. W. B. Simmons, Ltd.

Edmonton.—U.D.C. approved: C. H. Knight, 5 houses, First-av., Bush Hill Park; H. W. Evans, for Lester & Sons, dye works in Monmouth-rd.; S. Parkes & Brown, 6 houses and garages, Ranworth-rd.; J. Neilson, motor showroom at Seamer & Myddelton's garage, Abbey-rd.; Howis & Belcham, 12 houses, Montagu-rd

Finedon.—Northants E.C. to build infants' school. J. R. Williams, F.R.I.B.A., architect, Parkstile-chambers, Market-st., Kettering

Glasgow.—J. Miller, F.R.I.B.A., Blythswood-sq., preparing plans warehouse premises, Renfield-st.

Gorton.—Pye & Bennett, architects, 2, Booth-st., Manchester, preparing plans for rectory for Church of Our Lady and St. Thomas, for Rev. R. Royle.

Guildford.—T.C. approved: 2 pairs semi-detached houses, Dunsdon-av., H. Ashenden; proposed arcade, High-st. and North-st., W. J. King, architect, 5, Great James-st., Bedford-row, W.C.

Heston and Isleworth.—U.D.C. passed: H. Beazley, 4 shops with living accommodation over, Kingsley-rd.; Osterley Park Construction Co., additions factory, St. John's-rd.; W. Harbrow (1928), Ltd., 8 houses, Victoria-gardens; H. Allen, 12 houses, Great West-rd., Osterley; Roper Son & Chapman, 5 lock-up garages, rear 42, Bell-rd.; W. J. Harris, 1 shops, London-rd.; W. Brown & Sons, alterations and additions, Belgrave Works, Belgrave-rd.

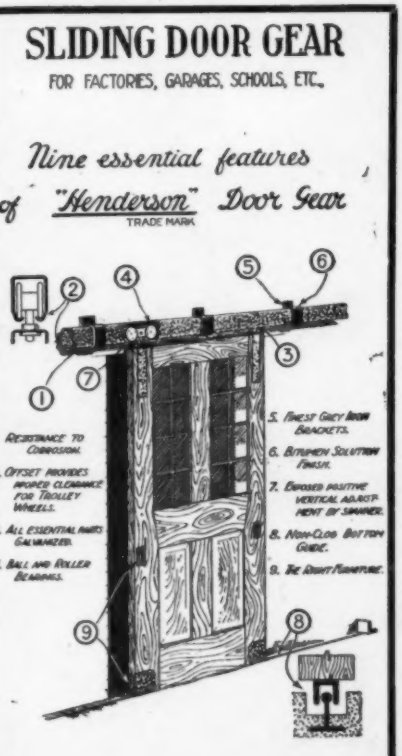
Ilford.—T.C. approved: F. Simpson, 5 houses, 26-34, Highcliffe-gardens; W. Wakeling, 7 houses, 51-55 and 58-64, Hamilton-av.; H. Smith, 6 houses and 2 garages, 50-60, Redbridge-lane; W. Longworth, 6 houses and garages, 75-85, Norfolk-rd.; A. P. Griggs, 6 houses and garages, 1-11, Canterbury-av.; J. T. Luton & Son, Ltd., extension of factory for Plessey & Co., Ltd., Vicarage-lane; Chillingworth & Co., 10 houses, 1-19, Glebelands-av.; E. Meredith, 4 houses, Grove-rd.; T. Anders, 4 houses, 41-44, Southdene-gardens, Eastern-av.; C. Fyatt, amended block plan, 3-27, Devonshire-rd.; H. W. Christophers, 8 houses, Bute-rd.; J. Aldridge, 11 houses, Brook-rd., 2 houses, Brancaster-rd.; G. H. Marshall, 8 houses and 5 garages, Barley-lane.

SLIDING DOOR GEAR

FOR FACTORIES, GARAGES, SCHOOLS, ETC.

Nine essential features of "Henderson" Door Gear

TRADE MARK.


1. RESISTANCE TO CORROSION.
2. OFFSET PROVIDES PROPER CLEARANCE FOR TROLLEY WHEELS.
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WRITE FOR BOUND CATALOGUE B26 TO

P. C. HENDERSON, LIMITED.

BARKING, ESSEX. PHONE: GRANGEWOOD 0242.

Ince.—U.D.C. proposing additional building adjoining public hall, at £550.

Ipswich.—Garage in Friar-st. and Princess-st. H. Hooper, A.R.I.B.A., architect, 13, Queen-st.

Lakenham.—Public-house, cost £3,000, for Young Crawshaws & Young, Ltd., Norwich. H. J. T. Gowen, architect.

Lewes.—S.R. considering cattle station. Plans by J. R. Scott, A.R.I.B.A., Waterloo Station, S.E.1

Maidstone.—T.C. approved: Marion-crescent, 4 houses, W. T. Burrows & Son; Tonbridge-rd., 2 houses, and Fountain-lane, 4 houses, R. Lawrence & Son.

Manchester.—Pye & Bennett, architects, 2, Booth-st., preparing plans improvements licensed houses for Hardy's Crown Brewery Co., Ltd.—A. Rangeley, architect, 30, Cross-st., prepared plans bank on site of "Old Boar's Head" Hotel, Withy-grove, for District Bank, Ltd.—Boddington's Brewery, Ltd., Strangeways, Manchester, proposing reconstruction of "Priory Arms," Gardner-st., Pendleton. Plans by Col. G. Westcott, 13, Bridge-st.

Mansfield.—M.H. approved 12 houses, for T.C., on Ravendale estate, by direct labour.

Mansfield.—T.C. passed: 4 houses, Bottle-lane, H. James.

Marshland.—Scheme another 80 houses passed by R.D.C.

Meriden, Coventry.—R.D.C. passed 18 houses at Minworth, for E. W. Squire.

Milnrow.—Application to M.H. for sanction to £1,565 for school clinic and child welfare centre.

Newquay.—Cottage Hospital Committee propose build hospital, at £10,000. Higman & Taylor, architects.

Newtown.—Carlisle E.C. received B. of E. approval to plans for open-air school, at £6,402.

Plymouth.—Alterations to showrooms in Frankfort-st., for Costers, drapers. L. H. A. Barron, architect, 11, The Crescent.

Plymouth.—Housing Committee accepted tender for 12 houses of two flats at Parkside, North Prospect.

Portland.—Anti-Submarine School be replaced by permanent premises, at £50,000. Plans by Admiralty, Whitehall.

Preesall.—U.D.C. erect public lavatories near Mount.

Preston.—T.C. approved: A. L. Stubbs, 16 houses, Boulevard.

Preston.—The Electricity Committee are proposing to make extensions to the Ribble Power Station, estimated to cost £52,000, to include aqueducts and screening chamber. The plans will be prepared by Mr. J. A. Robertson, consulting engineer, 20, Princes-st., Manchester.

Reading.—Miss S. R. Courtauld, of Bocking, Berkhamsted, offered £9,000 towards new geology building at University.

Rotherham.—M.H. approved 12 houses, Wickersley, for R.D.C.

Rotherham.—T.C. approved: Memorial Hall, Maidstone-rd., Rochester, for Vicar and Churchwardens of St. Margarent's Church.

Scarborough.—M.H. approved conversion Mechanic's Institute into public library, at £3,200.

Silsden.—Additions to Aire View school and alterations at Hothfield-st. school, for E.C.

Skegness.—Building Committee of Skegness and District Cottage Hospital agreed extend accommodation by new operating theatre and X-Ray Department. W. F. Willis, L.R.I.B.A., architect, Algitha-rd., Skegness.

Slough.—Baylis Court Farm be developed as building estate, accommodating about 2,000 houses.

Slough.—U.D.C. passed 3 pairs in Langley-rd., for Mansell & Stevens.

Soyland (Yorks).—U.D.C. approved warehouse for Farmers' Association.

Thornbury.—M.H. has sanctioned purchase for £100 site at Berrycroft, Hamfallow, for 4 houses. Also to 8 houses at Swanmoor, Almondbury.

Tiverton.—R.D.C. accepted tenders totalling £21,452 8s. for further 67 houses.

Twickenham.—T.C. passed: R. Woodhams, 12 houses, Fifth Cross-rd.; A. Mason & Co., 38 houses, Red House estate, Heath-rd.

West Mersea.—U.D.C passed 5 houses in Mill-rd, for C. M. White.

Windsor.—T.C. passed plans for: Schools in Clarence-rd., for Messrs. Leathart & Granger, 7, John-st., W.C.; 12 houses in and adjoining Springfield-rd., for W. Varney.

Worthing.—T.C. approved: 4 houses, West-av., Harrison, Boyle & Keasley; 4 houses and 5 garages on Reigate-rd., F. C. Tyler; 4 houses and garages, Forest-rd., W. Court, per H. M. Potter; Church, Lyndhurst-rd., Primitive Methodist Trustees, per H. Kelsall Armitage, architect; 4 houses and garages, Grand-av., M. R. Fletcher, per A. T. W. Goldsmith; 7 houses, Brougham-rd., E. H. Barton, per A. T. W. Goldsmith.

Mersey Tunnel.

The last big contract in connection with the construction of the road tunnel underneath the Mersey has been given out at Liverpool, when the tender of Messrs. Edmund Nuttall, Sons & Co., Ltd., of Trafford Park, Manchester, of £670,390 10s. 6d., for the construction of the full-sized entrance tunnels on the Liverpool side was accepted by the Tunnel Joint Committee.

* See also our List of Contracts, Competitions, etc.

TRADE NEWS

The Bournemouth Pavilion.

We learn that Messrs. James Clark & Son, Ltd., of Scoresby-street, S.E.1, were sub-contractors for the glazing of this pavilion, illustrated in our issue for March 22. The work was carried out by their Bournemouth branch.

Concrete Mixers.

Messrs. Stothert & Pitt, Ltd., inform us that they have now appointed Messrs. G. H. Draper & Co., St. Jude's Chambers, 28a, Smallbrook-street, Birmingham ('phone: Midland 4836) as their Midland agents for their mixer department which specialises in concrete mixers, roadmaking and quarry plant. The principal, Mr. G. H. Draper, held important positions on the staff of Messrs. Stothert & Pitt at their Bath and London offices for many years. He is, therefore, particularly well acquainted with this firm's manufactures and will always be at the service of surveyors, builders and contractors in his district.

Mastic Composition.

We have received details of a substance known as "Pliophalt" mastic composition, specially prepared for damp-proofing solid floors, to replace the old method of melting pitch and fluxing with creosote. We learn that "Pliophalt" mastic is very carefully manufactured and contains a large percentage of bitumen. It is always prepared to the same standard and does not vary in composition or consistency. It adheres to nails driven through the flooring and makes a thoroughly watertight joint. Messrs. R. S. Clare & Co., Ltd., will be pleased to arrange for surveyors or contractors interested personally to investigate the claims of this material. Their address is: Stanhope-street, Liverpool.

Refrigeration and 'Flu.

We have received the following interesting communication from Messrs. Frigidaire, Ltd.: "When we talk of 'fighting' influenza we are not employing a metaphor. A very realistic war is continuously going on between the human body and the germs that invade it. To fight the germs the human blood manufactures an army of what scientists call 'anti-bodies.' We are 'ill' when the germs outnumber the anti-bodies. Germs multiply in warmth and damp. Cold or heat kills them, particularly dry cold or heat. Cold air will be almost free of germs. That is why ventilation is important. Similarly, food that is kept in refrigeration, preferably in electrical refrigeration because it is dry, will be pure. A Frigidaire in the kitchen, providing permanently, automatically, an intense, dry cold, is, therefore, one of the finest possible defences, not only against 'flu, but against all illness. It ensures, briefly, that the food you eat, instead of swelling the ranks of the enemy germs, will increase the strength and vigour of the defending anti-bodies."

Antwerp's International Exhibition.

We learn that work on the Exhibition grounds is steadily progressing, so that the outlines of the coming World's Fair are already becoming visible. Unless anything unforeseen happens, everything will be ready in time (end of April, 1930), and from the very first visitors will find the Exhibition duly completed. It is worth noticing that the Belgian Colonial Department and important Belgian Colonial concerns are intending erecting a magnificent "Palais du Congo," of 3,500 sq. m. Anyone desirous of obtaining a licence for opening any retail shop within the precincts of the Exhibition should send an inquiry to the Executive Committee of the Antwerp Exhibition, 17, Canal des Recollets, Antwerp.

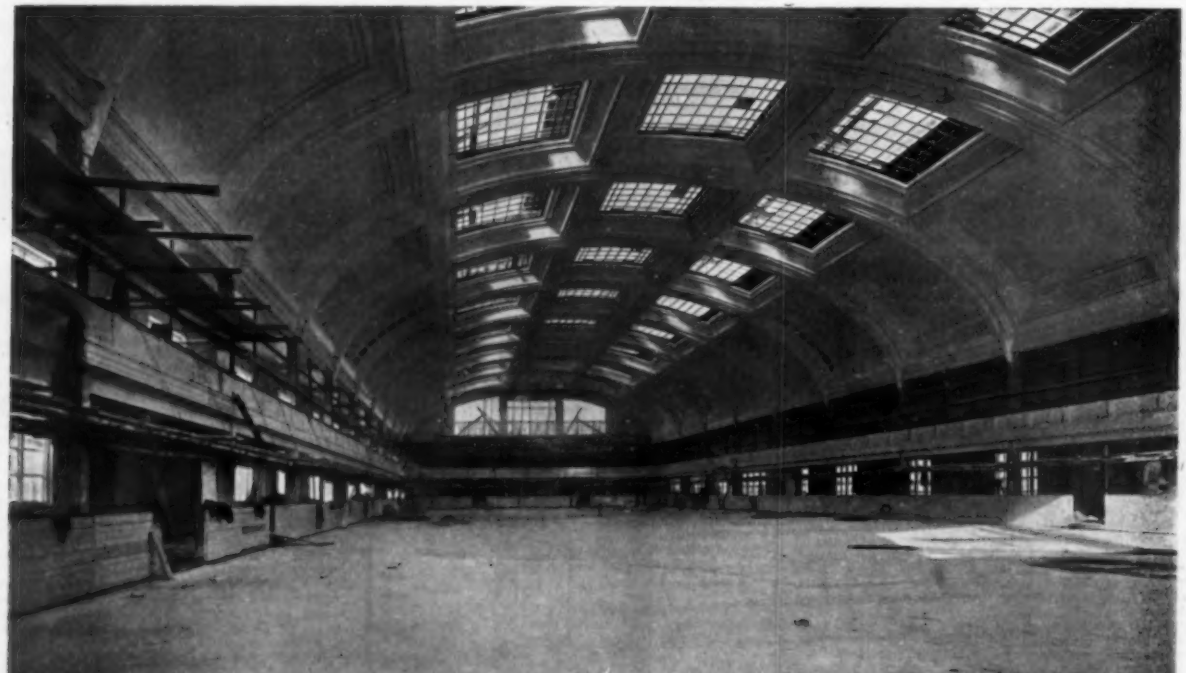
Waterproofing Cement.

Those architects and constructors who are faced with the problems of securing watertight foundations and retaining walls—and there are few of the profession who do not, at some period or another, come up against the difficulty—will find of more than ordinary interest a handsome brochure on the uses and achievements of "Colemanoid"—the waterproofer and hardener of cement concrete.

The brochure gives a few salient facts and a good many pictures. We learn from it that in mass concrete retaining walls "Colemanoid" speeds the work and saves the expense of asphalt renderings: that the waterproofer is also oil-proof, alkali-resistant and acid-resistant; that the addition of "Colemanoid" to concrete floor toppings of either sand or cement chippings aggregate produces a very material increase in hardness; that freezing weather (except when the temperature is below 12 deg. of frost) does not interrupt concrete work when the substance is added to the gauging water.

The jobs on which this waterproofer has been used are many. A selection, taken at random from the brochure, are:—The new Selfridge's; "Northcliffe House"; Midland Bank, Poultry; New "Underground" Headquarters, St. James's; Empire Theatre; "Firestone" Factory, Brentford; Piccadilly Theatre; Brixton "Astoria" Cinema; London Zoological Society's Sea-water Aquarium tanks; and the Richmond Ice-rink. This last building, which we illustrate in this number, contains a rink 236 ft. by 85 ft., the surface of which is a Portland cement-concrete topping made impermeable to the penetration of water by the use of "Colemanoid." The ice is frozen on top of this.

Those who wish to make further inquiry into the uses and merits of this substance should write for the brochure to the Adamite Company, Ltd., Regent House, Regent-street, W.1.



Richmond Skating Rink. Mr. Sydney Clough, F.R.I.B.A., Architect.

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 5 6
Second Hard Stocks	3 19 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, at			
King's Cross	2 12 3	Best Blue Pressed Staffs	9 5 0
Do., grooved for Plaster	2 14 3	Do. Bullnose	9 15 0
Do., Bullnose	3 7 3	Blue Wire Cuts	7 5 0

Best Stourbridge Fire Brick :—
2½ in. ..... 8 11 0 3 in. 10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers	21 0 0	D'ble Str'tch'rs	29 10 0
		D'ble Headers	26 10 0
Headers	20 10 0	One Side and two Ends	30 10 0
Quoins, Bullnose and 4½ in. Flats	27 10 0	Two Sides and one End	31 10 0
		Splays, and Squints	28 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS

Delivered London

	s. d.		s. d.
2 in. per yd. super.	1 11	3 in per yd. super	2 9
2½ in. „ „	2 4	4 in. „ „	3 6

	s. d.		
Thames Ballast	9 9	per yd.	delivered 2 miles radius Paddington.
Fit Sand	12 0	„ „	
Thames Sand	12 6	„ „	
Best Washed Sand	12 6	„ „	
½ in. Shingle for Ferro-Concrete	12 0	„ „	
¼ in.	12 6	„ „	
½ in. Broken Brick	11 6	„ „	
Pan Breeze	8 0	„ „	

Per ton delivered in London area in full van loads. Best Portland Cement. British.
Standard Specification. Test £2 6 0 to £2 8 0 28s. alongside at Vauxhall in 80-ton lots.

	£ s. d.
Ferrocrete per ton extra on above	0 7 6
Super Cement (Waterproof)	3 16 0
Roman Cement	5 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
„ Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
„ „ White	3 12 6
„ Fine	5 12 0
Strapite, Coarse	3 9 0
„ Finish	3 17 0
Grey Stone Lime	2 10 9
Chalk Lime	2 10 9
Best Ground Blue Lias Lime	1 17 6
Hair	per cwt. 2 2 6
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months carr. pd.
Stourbridge Fireclay in s'cks 37s. 0d. per ton at rly. dp.

STONE.

BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube ..... s. d. 2 10

BEER STONE—RANDOM BLOCK—
Free on rail at Seaton Station per ft. cube 2 3
Delivered free on rail Nine Elms, S.R. per ft. cube 3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.

PORTLAND STONE—
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube 4 4½
Do. do. delivered on road wagons at above stations, per ft. cube 4 5½
White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft *average*, and ½d. beyond 30 ft.

BOPTON-WOOD STONE.—
F.O.R. Quarries, Wirksworth, Derbyshire, s. d.
Random blocks from 10 ft. and over P. ft. cb. 14 0
Sawn two sides „ 22 6
Sawn three or four sides „ 27 6

YORK STONE, BLUE—*Rob's Hood Quality.*
Delivered at any Goods Station, London.
6 in., sawn two sides landings to sizes (under 30 ft. super) ..... Per ft. super 5 6
6 in. rubbed two sides, ditto ..... „ 6 0
3 in. sawn two sides slabs (random sizes) „ 2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) ..... „ 1 8½
1½ in. to 2 in. ditto, ditto ..... „ 1 3½

HARD YORK—
Delivered at any Goods Station, London.
Scappled random blocks ..... Per ft. cube 6 3
6 in. sawn two sides landing to sizes (under 30 ft. super) ..... Per ft. super 5 1½
6 in. rubbed two sides, ditto ..... „ 6 1½
4 in. sawn two sides slabs (random sizes) „ 2 1½
3 in. ditto ditto „ 2 10
2 in. self-faced random flags ..... Per yd. super 8 8

CAST STONE.

Delivered in London area in full van loads, per ft. cube: Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills, 10s. 0d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£30 0	3 × 6	£21 0
4 × 9	26 0	3 × 11	25 0
4 × 8	25 0	2 × 11	26 0
4 × 7	23 0	3 × 9	24 0
3 × 8	22 0	2½ × 9	24 0
3 × 7	22 0	3 × 4½	21 0
2½ × 7	21 0	3 × 4	21 0

PLANED BOARDS.

1 × 11	£30 0	1 × 9	£28 0

PLAIN EDGE FLOORING

Inches.	per sq.	Inches.	per sq.
¾	18/-	1½	30/-
¼	21/-	1½	34/-
1	24/-		

TONGUED AND GROOVED FLOORING

Inches.	per sq.	Inches.	per sq.
1	24/-	¾	16/6
1½	30/-	¼	19/-
1½	34/-	1	24/-

MATCHING (BEST).

Ins. BATTENS.	s. d.	SAWN LATHS.	s. d.
1½ × 2	per 100 ft. 2 6	Per bundle	2 6

1" AND UP THICK.

	£ s. d.	£ s. d.
Dry Austrian Wainscot, per ft. cube	0 16 0	to 0 18 0
Dry American and/or Japanese Figured Oak, ft. cube	0 14 0	to 0 15 0
Dry American and/or Japanese Plain Oak, ft. cube	0 10 0	to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0 15 0	to 0 18 0
Dry Log cut Honduras Mahogany, ft. cube	0 16 0	to 1 1 0
Dry Cuba Mahogany, ft. cube	1 1 0	to 1 10 0
Dry Teak, ft. cube	0 13 0	to 0 15 0
Dry American Whitewood, ft. cube	0 10 0	to 0 14 0
Best Scotch Glue, per cwt.	4 10 0	to —
Liquid Glue, per cwt.	4 7 0	to 5 10 0

SLATES.

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000.

	£ s. d.		£ s. d.
24 by 12	32 18 4	18 by 10	18 12 11
22 by 12	29 17 11	18 by 9	16 9 2
22 by 11	27 14 2	16 by 10	15 12 6
20 by 12	26 5 0	16 by 8	12 3 9
20 by 10	22 10 0		

TILES.

Delivered at London rate stations in full truckloads of not less than 6 tons. Per 1,000. f.o.r. London.

Best machine-made tiles from Broseley or Staffordshire district	5 7 6
ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) { Hand-made	0 9 6
{ Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

	£ s. d.
R.S. Joists, cut and fitted	12 10 0
Plain Compound Girders	14 10 0
„ Stanchions	16 10 0
„ In Roof Work	19 10 0

MILD STEEL ROUNDS.—To London Station, per ton

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 0 0	⅝ in. to ¾ in.	10 15 0
⅜ in.	11 0 0	⅞ in. to 2½ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Tubes. Wrought Mild Steel.	Genuine Staffs. Iron.	Fittings. ⅛ in. and under.	Over ⅛ in.	Flanges. ⅛ in. and under.	Over ⅛ in.
	%	%	%	%	%	%
Gas	67½	50	42½	45	52½	55
Water	63½	46½	37½	40	47½	50
Steam	60	42½	32½	35	42½	45
Galv. gas	55	37½	32½	35	42½	45
Galv. water	50	32½	27½	30	37½	40
Galv. steam	45	27½	22½	25	32½	35

C.I.—HALF-ROUND GUTTERS—London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/3½	11½d.	3½d.
3½ in.	1/4½	1/1½	3½d.
4 in.	1/6	1/3	3½d.
4½ in.	1/7½	1/4½	4½d.
5 in.	1/10½	1/6½	5½d.

O.G. GUTTERS.

3 in.	1/8	1/4½	3½d.
3½ in.	1/8	1/4½	3½d.
4 in.	1/9½	1/4½	3½d.
4½ in.	1/11½	1/7½	4½d.
5 in.	2/4½	1/10½	5½d.

RAIN-WATER PIPES, &c.

Per yd. in 6 ft.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/10½	1/3	1/9½
2½ in. „	2/0½	1/4½	2/1½
3 in. „	2/6	1/9	2/7½
3½ in. „	2/11½	2/0½	3/0½
4 in. „	3/5	2/6½	3/8½

L.C.C. COATED SOIL PIPES—London Prices ex Works.

	Pipe.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
2 in. per yd. in 6 fts. plain	3 3	2 4½	2 10
2½ in. „	3 9	2 7½	3 7
3 in. „	4 6	2 10	4 2½
3½ in. „	4 11½	3 7	4 11½
4 in. „	5 5½	4 0½	5 9

L.C.C. COATED DRAIN PIPES—London Price sex Works

	Pipe.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
3 in. per yd. in 9ft. lengths	4 4	5 1	8 0½
4 in. „ „	4 10	5 8	10 0
5 in. „ „	6 6	10 10	17 1
6 in. „ „	6 8	13 2	21 9

Gaskon for jointing, 38/6 per cwt.

IRON—	Per ton in London. £ s. d.		£ s. d.
Common bars	11 0 0	to	12 0 0
Staffordshire Crown Bars—Good merchant quality	11 10 0	to	12 10 0
Staffordshire Marked Bars	14 0 0	...	15 0 0
Mild Steel Bars	10 0 0	...	11 0 0
Steel Bars, Ferro-Concrete quality, basis price	10 0 0	...	11 0 0
Hoop iron, basis price	11 10 0	...	12 10 0
„ Galvanised	27 0 0	...	28 0 0
Soft Steel Sheets, Black—Ordinary sizes, to 20 g.	13 0 0	...	14 0 0
„ „ „ 24 g.	14 0 0	...	15 0 0
„ „ „ 26 g.	16 0 0	...	17 0 0
Sheets Flat Best Soft Steel, C.R. and C.A. quality—Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	15 0 0	...	16 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	16 0 0	...	17 0 0
Ordinary sizes, 6 ft. by to 3 ft. to 26 g.	18 0 0	...	20 0 0
No. 1 quality £4 per ton extra.			
Flat and Galvanised Corrugated Sheets—Ordinary sizes, 6 ft. to 9 ft. to 20 g.	16 10 0	...	17 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	17 0 0	...	18 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	20 0 0	...	21 0 0
Sheets Galvanised Flat, Best quality—Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	21 0 0	...	22 0 0
Best Soft Steel Sheets, 22 g. and 24 g.	23 0 0	...	25 0 0
Best Soft Steel Sheets, 26 g.	24 10 0	...	25 10 0
Cut Nails, 3 in. to 6 in.	18 0 0		
(Under 3 in. usual trade extras.)			

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	36 0 0
Pipe in coils	36 10 0
Soil pipe	39 10 0
Compo pipe	40 10 0

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 5s. cwt. extra.
Old lead, ex London area, at Mills ..... per ton 24 10 0

COPPER.

	s. d.
Seamless Copper tubes (basis)	per lb. 1 1½
Strong sheet	„ 1 0
Thin	„ 1 1
Copper nails	„ 2 3
Copper wire	„ 2 4

PLUMBERS' BRASS WORK.
Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.
½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
29/- 45/- 76/- 153/- 246/- 510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.
½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
41/6 62/- 92/- 174/- 300/- 588/- per doz.

RIVER PATTERN SCREW DOWN MAIN FERRULES.
½ in. ¾ in. 1 in.
39/6 60/- 116/6 per doz.

CAPS AND SCREWS.
1¼ in. 1½ in. 2 in. 3 in. 3½ in. 4 in.
7/6 10/- 14/- 23/- 30/- 42/- per doz.

DOUBLE NUT BOILER SCREWS.
½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
7/6 11/- 17/- 29/- 36/- 63/- per doz.

BRASS SLEEVES.
1¼ in. 2 in. 3 in. 3½ in. 4 in.
10/- 12/- 20/- 24/- 31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.
½ in. ¾ in. 1 in. 1¼ in. 1½ in.
35/- 56/- 98/- 162/- 228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.
1¼ in. 1½ in. 2 in. 3 in.
8 lbs. P. traps ... 33/- 41/- 56/- 101/- per doz.
8 lbs. S. traps ... 35/- 45/- 66/- 126/- „

TIN.—English Ingots, 2/6 per lb. SOLDER.—Plumber's 1/1. Tinmen's 1/4, Blowpipe 1/5 per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon	0	2 9
„ „ „	in barrels ... „	0	2 11
„ „ „	in drums ... „	0	3 1
Boiled „ „	in barrels ... „	0	3 1
„ „ „	in drums ... „	0	3 4
Turpentine in barrels	„	0	4 2
„ in drums (10 gals)	„	0	4 4
Genuine Ground English White Lead, per ton (In not less than 5-cwt. casks.)		56	0 0

Extra for 1-cwt. kegs over 5-cwt. casks is 5/0 cwt.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

PAINTS, &c. (*contd.*)

		£	s.	d.
Genuine White Lead Paint. "Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morrzanawyte," "Polacco," "J." Brand, and other best brands (in 14 lb. tins) not less than 5 cwt. lots ..	per ton delivered	74	0	0
Red Lead, Dry (packages extra) ..	per ton	39	0	0
Best Linseed Oil Putty	per cwt.	0	15	0
Filleol	,,	0	15	6
Size, XD quality	ftn.	0	3	6

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per ft.		Per ft.
15 oz. fourths ..	2½d.	32 oz. fourths	6½d.
15 ,, thirds ..	3½d.	32 ,, thirds	8½d.
21 ,, fourths ..	3½d.	Obscured Sheet, 15 oz.	3½d.
21 ,, thirds ..	4d.	,, 21 ,,	4½d.
26 ,, fourths ..	4d.	Fluted, 15oz. 6½d., 21oz.	9d.
26 ,, thirds ..	6½d.	En'iled, 15oz. 4½d., 21 oz.	6d

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

	Per ft.
¼ Rolled plate	4½d.
⅜ Rough rolled	5½d.
½ Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic Stippolyte, and small and large Flemish White ..	5½d.
Ditto, tinted	8½d.
Rolled Sheet	4½d.
White Rolled Cathedral	4½d.
Tinted do.	6½d.

Cast plate is same price as rough rolled.

VARNISHES, &c.

		Per Gallon. £	s.	d.
Oak Varnish	Outside	0	14	0
Fine ditto	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal	ditto	1	0	0
Pale Copal Carriage	ditto	1	4	0
Best ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	18	0
Fine Copal Cabinet	ditto	1	2	6
Fine Copal Flatting	ditto	1	0	6
Hard Drying Oak	ditto	0	18	0
Fine Hard Drying Oak	ditto	0	19	0
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	2	0
Best ditto	ditto	1	12	0
Best Japan Gold Size		0	12	6
Best Black Japan		0	10	6
Oak and Mahogany Stain (water)		0	12	0
Brunswick Black		0	7	6
Berlin Black		0	14	0
Knotting (patent)		1	5	0
French and Brush Polish		0	17	0
Liquid Dryers in Terebine		0	9	0
Quirass Black Enamel		0	7	0

NEW BUILDINGS IN SCOTLAND

Aberdeen.—Houses.—The Plans Committee of the Aberdeen Town Council have passed plans for the building of 416 dwelling-houses, amounting to £137,450. They included 392 for the Corporation houses in the School-road scheme.

Arbroath.—Bridge.—A proposal to widen a bridge at Friockheim and the approaches thereto, at an estimated cost of £1,000, was agreed to by Arbroath District Committee, provided a 60 per cent grant is obtained from the Ministry of Transport, and the necessary ground required obtained from the proprietors.

Dunfermline.—Extension.—The Carnegie Dunfermline Trustees have decided to give a sum of £5,000 to the Dunfermline and West Fife Hospital Extension Fund.

Dundee.—Buildings.—Plans and sections of the following proposed new buildings, etc., have been lodged at the office of the City Engineer:—Anderson's-lane—Alterations and additions for Messrs. Spalding and Valentine; Messrs. Mills and Shepherd, architects, 9, South Tay-street; Hawkhill—Alterations for the British and Argentine Meat Co., Ltd.; Messrs. Thoms and Wilkie, architects, 21, South Tay-street; Milton-street—Alterations for Messrs. Francis Stevenson and Sons, Ltd.; Messrs. Maclaren, Soutar and Salmond, architects, 15, South Tay-street; Roseangle—Office and factory for the Dundee Aerated Water Manufacturing Co., Ltd.; Messrs. Thoms and Wilkie, architects, 21, South Tay-street.

Dumfries.—Housing.—Dumfries Town Council have had plans passed by the Dean of Guild Court for another municipal housing scheme. The site selected is allotment ground along the Annan road near to the L.M. and S. railway line. Nine blocks of two-apartment houses are to be built at an estimated cost of £11,500.

Glasgow.—Baths.—The Corporation proposes to build several baths or washhouses, at a cost of over £100,000.

Haddington.—Hospital.—It has been decided to proceed with the erection of a cottage hospital in Haddington.

BUILDING TRADE WAGES IN SCOTLAND*

The following are the present rate of wages in the building trade in the principal towns of Scotland. E ery endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons'‡ Bricklayers'‡ Plasterers'†
Aberdeen	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Airdrie	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Alexandria	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1
Ayr	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Bathgate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Coatbridge	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumbarton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumfries	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/6½	1/2
Dundee	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3 †1/2½
Dunfermline	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	‡1/2½ †1/2½
Edinburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½ †1/2½
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/6½	1/7	1/6½	1/7	1/6½	1/6½	1/7	1/2
Glasgow	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Greenock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Hamilton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2
Hawick	1/7	1/7	1/7	1/7–1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Inverness	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/- to 1/2
Kilmarnock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Kirkcaldy	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/-
Lanark	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Leith	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½† 1/2½
Motherwell	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Perth	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Stirling	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	1/2½
Stirlingshire (Eastern District)	1/7½	1/9	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Wishaw	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 659.

TENDERS

* Denotes *accepted.*
† Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

Amersham.—34 houses in Plantation-road, for the R.D.C.:—
*Franklin & Co. £13,431

Bakewell.—Shelter and conveniences at the recreation ground, for the U.D.C. Mr. T. W. Baker, surveyor. Quantities by the surveyor:—

C. E. Bailey, Winster	£1,699 0 0
F. A. Roberts, Matlock Bath...	1,398 17 0
W. A. Sheldon, Baslow	1,339 10 0
A. Plant, Sheffield	1,306 6 9
John H. Cartledge, Baslow	1,298 16 6
A. Marsden & Son, Youlgrave...	1,297 16 4
Isaac Groves, Stoney Middleton	1,263 10 0
J. W. Wildgoose & Sons, Ltd., Matlock	1,239 0 0
D. & F. Sheldon, Baslow	1,190 8 11
Barker & Mellor, Bakewell	1,146 11 6
J. W. & J. Mettam, Bakewell ...	1,115 0 0
*T. Clark, Bakewell	1,112 18 8

Barnsley.—Painters' work required in connection with the two new elementary schools which is proposed to erect in Littleworth-lane, for the E.C.:—
‡R. R. Fletcher & Sons £510

Belper.—Works in connection with the sewage scheme at Allestree, near Derby, for the R.D.C.:—
*G. F. Tomlinson, Derby £11,500

Birmingham.—New house in Handsworth Wood, Birmingham, for Mr. Walter Scott. Mr. L. L. Dussault, architect, 39, Newhall-street:—

W. Skinner, Birmingham	£6,080
W. Sapcote & Sons	6,047
James Moffatt	5,990
T. Elvins & Sons	5,919
Whittall & Sons	5,860
Isaac Langley	5,712
Percy Cox	5,704
G. & H. Marshall	5,677
*Geo. Webb & Sons, Ltd.	5,630

Birmingham.—Public swimming baths at Sparkhill, for the Baths Committee. Mr. Herbert H Humphries, City Engineer:—
*T. Johnson, Great Brook-street, Birmingham £29,038

Birmingham.—For (1) public convenience at corner of Gravelly-hill and Tyburn-road; (2) public convenience in Lightwood-park; (3) public convenience at Rednal; (4) alterations, extensions and renovations at Sorrento Hospital, Wake Green-road, Moseley; (5) renovations at Bacchus-road disinfecting station, Winson Green; (6) renewal of roof and ceilings of pavilion No. 1 at West Heath Sanatorium, Rednal-road, Northfield, for the Corporation. Mr. Herbert H. Humphries, City Engineer:—
(*1*) *and* (*2*)—*B. S. White, Commercial-buildings, Birmingham.
(*3*)—*J. E. Williams, Victoria-road, Aston, Birmingham.
(*4*), (*5*) *and* (*6*)—*B. S. White.

Bradford.—Shops and warehouse, for Messrs. Taylor Parsons, Ltd., in Aldermanbury:—
Masons—*E. Balmforth & Sons, Ltd.
Steelwork—*H. Barrett & Sons, Ltd.

Cardiff.—Improvements to St. Alban's school, Swinton-street, for the Rev. F. O. Mason. Mr. C. F. Bates, A.R.I.B.A., architect, Tredegar-chambers, 78, Bridge-street, Newport (Mon.):—
*Tucker Bros., Cardiff.

Chelmsford.—Additions and improvements at the Cathedral. Sir Charles Nicholson, F.R.I.B.A., architect, 2, New-square, Lincoln's Inn, London, W.C.:—
*Bowman & Sons, Stamford.

Chester.—Heating apparatus and plumbing work at the Isolation Hospital, for the City Council:—
*F. J. Proud & Sons, Chester £160

Chester.—56 parlour houses on the Eaton-road estate, for the City Council:—
*Harry Pugh, Caergwrle, Wrexham £22,596 16

Chiswick.—Flats.—Erection of two blocks of 54 flats each, for the Brentford and Chiswick U.D.C. Mr. Edward Willis, F.S.I., M.I.C.E., architect, Town Hall, Chiswick, W.4. Quantities by Messrs. George Spencer & Co., 79, Gresham-street, E.C.:—
*Building & Public Works Construction Co., Ltd., County Works, Swindon £64,165

Coleford.—20 houses in Tufthorne-lane, for the U.D.C.:—

J. & R. J. Angrove, Coleford ...	Each £330
Pritchard & James, Berry Hill	324
Rareland & Donald, Cinderford	323
H. Miles & Son, Milkwall	320
A. Redding, Lydney	361
*S. J. Kear, Broadwell	315

(*Continued on page* 668.)

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	38	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	32	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	" "	9	6
Three-quarter-inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Beer stone and all labour fixed	" "	15	0
Portland stone fixed	" "	20	0

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	0	
Do. joists	" "	5	6	
Do. roofs, floors and partitions	" "	6	0	
Do. trusses	" "	8	6	

		¾"	1"	1½"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-
Flat centering for concrete floor, including struts or hangers	"				50 0
Do. to beams	per ft. sup.				0 11
Centre for arches	"				1 6
Gutter boards and bearers	"				1 0

FLOORING.		¾"	1"	1½"	1¾"
Deal-edges shot	per sq.	—	44/6	53/-	60/6
Do. tongued and grooved	"	—	49/-	57/6	65/-
Do. matchings	"	45/-	51/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights ; average size	" "	3	9

DOORS.		1¼"	1½"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1½"	1¾"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross-tongued	"	2d.	2d.	2d.

STAIRCASES.

	1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1½ in.	per ft. run	0	9
Mahogany handrail : average, 3 in. × 3 in.	" "	6	0
Add if ramped	" "	12	0
Add if wreathed	" "	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roofwork	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	"	1/9	2/-	2/6	3/3
Rain-water pipes with ears	"	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	51	0
Do. Do. in flats	"	50	0
Extra labour and solder in coated cesspools	each	6	9
Welf joint	per ft. run	0	6
Soldered seam	" "	1	3
Copper nailing	" "	0	3

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service	"	1/8	2/2	2/7	3/10	—	—
Do. soil	"	—	—	—	—	—	6/9
Bends in lead pipe	each	—	—	—	—	3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	—
Re.d lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"	—	—	—	14/7	19/6	—
Bib cocks and joints	"	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	"	15/4	17/2	25/8	64/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	6
Do. Do. Sirapite	" "	2	9
Do. Do. Keen's	" "	4	0
Add saw lathing	" "	1	7
Add metal lathing	" "	2	6
(Not including hangers or runners, etc., for suspended ceilings.)			
Portland cement screed	" "	2	2
Do. plain face	" "	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	8½
26-oz. Do.	" "	1	0
Obscured sheet	" "	1	1
¼-in. rolled plate	" "	0	9
¼-in. rough rolled or cast plate	" "	0	10½
¼-in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TENDERS

(Continued from page 666.)

Coulsdon and Purley.—New Council Offices, for the U.D.C. Mr. W. B. Nicholls B. Hughes, architect, 4, Raymond-buildings, Gray's Inn, W.C.1 :—

S. H. Wray & Co., Purley	£28,462
J. Crewdson, Horley	27,1[illegible]
Sewell & Richardson, Wimbledon	27,087
S. Dale, Mitcham	26,975
W. Jones & Son, Ltd., Westminster	26,950
J. A. Pettit & Co., Ltd., Warlingham	26,564
F. F. Foster, Norwood Junction	26,372
W. C. Everitts, Croydon	26,144
Dove Bros., Islington	25,935
Perry's (Ealing), Ltd.	25,927
Hammond & Barr, Ltd., Chelsea	25,745
R. Mansell, Croydon	25,700
Trollope & Colls, Dorking	25,600
T. R. Muirhead, Ltd., Westminster	25,500
W. Moss & Sons, Cricklewood	25,497
Pitcher Construction Co., Ltd., W.	25,337
Miskin & Sons, Ltd., St. Albans	25,240
Truett & Steel, Ltd., Thornton Heath	24,974
E. H. Smith, Croydon	24,880
H. H. & F. Roll, Ltd., Epsom	24,688
Burnand & Pickett, Ltd., Wallington	24,597
C. H. Gibson, Ltd., Croydon	24,588
W. Bagg & Sons, Ltd., Croydon	24,515
E. A. Russell, Walthamstow	24,400
Galbraith Bros., Camberwell	24,314
W. P. Banks, Ltd., Sevenoaks	24,209
G. H. Denne & Sons, Ltd., London	23,950
‡H. Bacon & Sons, Ltd., Coulsdon	23,945
Norman Smith & Son, Maidstone	23,925

Fleet.—Branch showrooms and depot for the Aldershot and District Gas, Water and District Lighting Co., Ltd., Aldershot. Mr. John Love, architect :—

Steelwork—*Smith Walker, Ltd., Westminster.
Floors—*Caxton Floors, Ltd., Caxton-street, S.W.1.
Stonework—*Empire Stone Co., Ltd., Narborough.

Friern Barnet.—Greenhouse and potting shed, inclusive of heating installation, at Friary-park, for the U.D.C. Mr. J. M. Gameson, engineer and surveyor :—

*William Wood & Son, Ltd., Taplow, Bucks.

Glanford Brigg.—Reinforced concrete water tower, capacity 30,000 gallons, also for small pump house, etc., in Burton-upon-Stather, near Brigg, for the R.D.C. Mr. J. H. Haiste, engineer, Union Bank-chambers, Trinity House-lane, Hull :—

A. E. Farr, London	£2,050 0 0
Fred. Mitchell & Son, Ltd., Manchester	1,967 12 1
Sangwin, Ltd., of Hull	1,789 2 4
A. Richmond & Sons, Retford	1,351 7 1
Reinforced Concrete Construction Co., Manchester	1,711 3 7
Lotz & Keir, Stoke-on-Trent	1,373 11 11
Hull & Busfield, Ltd., Leeds	1,177 6 5
Victoria Construction Co. (London), Ltd., London	1,132 9 5
E. E. Dales & Sons, Ltd., Cleethorpes	1,130 12 0
*Squires & Sons, Ltd., of Selby	1,020 15 8

Greenwich.—Alterations and additions to form new wards for children at the Greenwich and Deptford Hospital, Vanbrugh Hill, Greenwich, S.E.10. Mr. Alfred Roberts, F.R.I.B.A., architect, 92, London-street, Greenwich, S.E.10 :—

John Crewdson, Horley	£1,875 0
A. O. Laird, Ltd., W.C.2	1,860 0
J. B. Farrar & Co., Whitechapel	1,785 0
J. Ellerman & Son, Ltd., Beckenham	1,783 0
T. D. Long, Deptford	1,738 0
W. Mills & Sons, Ltd., Greenwich	1,695 0
A. J. Easton, Willesden	1,669 18
Hammond & Barr, Ltd., Chelsea	1,650 0
*T. & R. Muirhead, Ltd., Westminster	1,560 0
George Coe, Chislehurst	1,545 0

Halifax.—12 houses on the Stretchgate-lane site, Pellon, for the C.B. :—

Excavator, etc.—*Pickles Bros., Ltd., Mile Thorn, Halifax.
Carpenter and Joiner—*E. Johnson, Boothtown.
Slater—*F. Thompson, Ltd., Stanningley.
Plasterers—*Lumb Bros., King Cross, Halifax.
Plumber—*F. Stocks, Halifax.
Electricians—*Headen & Brennand, King Cross, Halifax.

Hastings.—Additions and alterations to 29 and 30, Havelock-road, for the Hastings Permanent Building Society. Messrs. Henry Ward, Son & Wray, architects, 8, Bank-buildings. Quantities by Messrs. L. A. Francis & Sons :—

W. Piper, Hastings	£10,022
Peerless Dennis, Eastbourne	9,560
R. Cook & Sons, Crawley, Sussex	8,956
Hutchinson & Son, St. Leonards-on Sea	9,170
Eldridge & Cruttenden, St. Leonards-on-Sea	8,960
W. Goodwin, Ltd., Hastings	8,949
—, Burden, Hastings	8,[illegible]5
R. Newton & Sons, Horseforth	8,470
A. Radcliffe, Hastings	8,250
Bates & Sons, Tunbridge Wells	8,208
J. Crewdson, Crawley, Sussex	8,121
J. Bodle, Eastbourne	7,937
A. Hood, St. Leonards-on-Sea	7,860
*Hayhurst & Wright, 8, Trinity-street, Hastings	7,334

Hayes.—66 houses, for the Great Western (London) Garden Village Society, Ltd. Mr. T. Alwyn Lloyd, F.R.I.B.A., architect, 6, Cathedral-road, Cardiff :—

Pondac, Ltd., London	£29,432
H. E. Skull, Wembley	29,152
House Builders' Association	28,234
R. Mansell, Croydon	27,680
Unit Construction Co., Ltd., London	26,868
Lawes, Cherry & Co., London	26,564
Perrys (Ealing), Ltd., London	26,560
Walter Jones & Sons, Ltd., Westminster	26,435
Rhys, J. Rees & Co., Ltd., Kingston-on-Thames	26,308
Building and Public Works Construction Co., Ltd., Swindon	24,960
P. R. Absalom, Limited, Cambridge	24,324
*A. Roberts & Co., Ltd., Kensington	24,218

Hereford.—10 almshouses at the Bartonsham, for the Hayes Charity Trustees. Messrs. Bettington & Son, architects, Palace-chambers :—

*C. Jewell & Son, Coronation-road, Aberkenfig, Glam. £3,996

Hertford.—Grammar school. Messrs. Talbot-Browne & Fisher, FF.R.I.B.A., architects, Bury-stead-place, Wellingborough :—

*Richard Ginn & Son, Hertford
Asphalt—*Ragusa Asphalte Paving Co., Ltd., London.
Artificial stonework—*Excelsior Patent Stone Co., Northampton.
Concrete—*British Reinforced Concrete Co., Stafford.

Holland.—Reinforced concrete bridge and contingent works over the Fourth District drain, at Pinchbeck, near Spalding, for the Lincs C.C. Mr. W. A. Rogerson, County Surveyor, County Hall, Boston :—

‡Reinforced Concrete Construction Co., Ltd., Elsinore-road, Old Trafford, Manchester.

Heunslow.—126 non-parlour type houses on the Sutton-lane estate, for the Heston and Isleworth U.D.C. Mr. J. G. Carey, surveyor, Town Hall-chambers :—

A. & F. Leather, Lambeth	£103,502
H. Street, Slough	73,445
A. Roberts & Co., Ltd., Earl's Court	66,647
Craig & Son, Westminster	66,647
Sherran, Ltd., Midhurst, Sussex	66,645
Perry's (Ealing), Ltd., Ealing	66,605
D. Weston & Co., Ltd., London	65,163
Pondac, Ltd., Paddington, W.	61,845
Lawes, Cherry & Co., Westminster	61,835
H. E. Skull, Wembley	60,980
Franklin & Co., Erith	60,918
Walter Jones & Sons, Ltd., Westminster	60,465
Building & Public Works Construction Co., Ltd., Swindon	56,950
Henry Boot & Sons, Ltd., Sheffield	56,743
Street & Co., Southwark, S.E.	55,931
Unit Construction Co., Ltd., London	55,424
*Blackwell & Meyer, Bexleyheath	52,789

Hull.—4 shops and 18 tenement dwellings, Hedon-road, for the Corporation. Mr. D. Harvey, A.R.I.B.A., City Architect, Guildhall, Hull :—

*Hinch Bros., Ltd., Hull £8,100
(Subject to M.H. sanction)

Kearsley.—80 non-parlour type houses, with sewers, roads and footpaths, on the Taskers-lane housing site, for the U.D.C. Mr. E. Shaw, surveyor :—

*J. Gerrard & Sons, Ltd., Swinton, Lancs.

Keynsham.—24 non-parlour houses on the Council's estate, for the R.D.C. Mr. H. W. Argile, Building Surveyor, 16, High-street, Keynsham, near Bristol :—

Warfield & Co., Bath	£10,376
A. Jeffries & Son, Oldland	9,650
Burston & Hawkins, Clevedon	8,900
P. E. Bailey, Bristol	8,796
Ayres & Son, Kingswood	8,520
Avondale Building & Estate Co., Bristol	8,400
William Ash & Son, Bristol	8,280
Wallace Wiggins & Sons, Keynsham	8,196
*H. T. Cane, Wells-road, near Whitchurch, Bristol	7,580

Lancaster.—Reconstruction of premises into bank, for the Midland Bank, Ltd. :—

*Wm. Nicholson & Son (Leeds), Ltd.

Leeds.—Reconstruction of the "Rock Inn," for Messrs. John Smith's Tadcaster Brewery Co., Ltd. Mr. B. Wilson, architect, Tadcaster :—

*Lazenby Bros.

Leeds.—For super garages at Chapel-Allerton, for Mr. A. G. Wilson. Mr. G. W. Atkinson, architect, 1, Mark-lane :—

Main contract—*F. Whittaker.
Asphalt—*Tunstall's Rock Asphalte Co., Ltd.

Linton.—For (1) 6 cottages at Balsham; (2) 4 at Castle Camps; (3) 6 at Duxford; (4) 4 at Hildersham; (5) 4 at Ickleton; (6) 20 at Linton; (7) 20 at Sawston; (8) 2 at West Wickham; and (9) 10 at Whittlesford, for the R.D.C. :—

J. Brignell, Cambridge (7) £8,100; (9) £1,100.
B. & P. Cope & Co. (3) £2,280; (5) £,480; (7) £7,800; (9) £3,900.
E. G. French, Birdbrook (2) £1,550; (6) £8,400; (8) £825.
F. J. Godfrey (5) £1,500.
J. Gutteridge & Son, Peterborough (1) £2,685; (2) £1,784; (3) £2,868; (4) £1,790; (5) £1,760; (6) £9,180; (7) £9,620; (8) 890; (9) £4,780; total for 76 cottages, £36,357.
F. Hale & Sons, Sutton (1) £2,300; (4) £1,540; (5) £1,490; (8) £745.
T. Harding & Sons, Duxford (2) £2,355; (5) £1,530; (9) £3,925.
P. L. Harradine, Harlton (7) £4,200 for 10 only.
King & Morgan, Cambridge (1) £2,644.
Mason & Son, Haverhill (1) £2,580; (2) £1,570.
*H. J. Paintin, High-street, Linton (1) £2,156; (2) £1,370; (3) £2,100; (4) £1,400; (5) £1,360; (6) £6,500; (7) £6,750; (8) £720; (9) £3,250.
S. H. Percival, Hellows Bumpstead (2) £1,484.
E. Rooke & Son, Saffron Walden (1) £2,240; (2) £1,495; (3) £2,358; (4) £1,487; (5) £1,489; (6) £7,849; (8) £789.
Stevens Bros., Cherry Hinton (1) £2,190; (7) £7,450.

London.—Painting and cleaning of schools at Easter, for the L.C.C. :—

	Basis "A"	Basis "B"
Brandlehow-road (Putney)—		
‡Triggs & Co., Ltd., Lambourne-works, Mackay-road, Clapham, S.W.4	£1,064	*£1,144
Architect's estimate	£1,182	
Canterbury-road (Deptford)—		
*A. Black & Son, Newport works, 96, Perry-vale, Forest-hill, S.E.23	£1,259	
Architect's estimate	£1,325	
The Highway (Whitechapel and St. George's)—		
E. Proctor & Sons, 326, High-street, Plumstead, S.E.18	£1,227	*£1,247
Architect's estimate	£1,210	
Manchester-street (St Pancras, S.E.)—		
Stevens & Sons, 67, Crouch-hill, N.4	£1,272	*£1,344
Architect's estimate	£1,285	
Oldridge-road (Balham and Tooting)—		
Lole & Co., Ltd., 45, Garratt-lane, S.W.18	£1,097	
Architect's estimate	£1,133	
Risinghill-street (Finsbury)—		
Stevens & Sons, 67, Crouch-hill, N.4	£1,378	*£1,438
Architect's estimate	£1,406	
Rochelle-street (Bethnal Green, S.W.)—		
Falkus (Public Works), Ltd., 23, White Lion-street, Bishopsgate, E.1	£1,073	
Architect's estimate	£1,128	
Rolls-road (Camberwell, N.)—		
Burnard & Pickett, Ltd., Woodcote-road, Wallington	£1,351	
Architect's estimate	£1,535	
Teesdale-street (Bethnal-green, N.E.)—		
G. Barker, 48 and 50, New-road, E.1	£1,016	*£1,010
Architect's estimate	£1,091	

London.—74 houses, for the Great Western (London) Garden Village Society, Ltd. Mr. T. Alwyn Lloyd, F.R.I.B.A., architect, 6, Cathedral-road, Cardiff :—

Pondac, Ltd., London	£38,366 0
H. E. Skull, Wembley	37,267 0
R. Mansell, Croydon	36,650 0
House Builders' Association, London	36,426 10
Perrys (Ealing), Ltd., Ealing	35,170 0
Unit Construction Co., Ltd., London	34,764 0
Rhys J. Rees & Co., Ltd., Kingston-on-Thames	34,550 0
Lawes, Cherry & Co., London	34,422 0
Walter Jones & Sons, Ltd., Westminster	34,390 0
Building and Public Works Construction Co., Swindon	33,742 0
*A. Roberts & Co., Ltd., Kensington	33,100 0
F. R. Absalom, Ltd., Cambridge (withdrawn)	31,411 10

London.—Shops and showrooms in High-street, Palmers Green, N. Messrs. H. Seymour, Couchman & Sons, architects, 520, Tottenham High-street, N. :—

Steelwork—*Matthew T. Shaw & Co., Ltd., Millwall, E.
Artificial stonework—*Patent Victoria Stone Co., Ltd., London Wall, E.C.
Floors—*British Doloment Co., Ltd., Aldwych, W.C.

London.—New premises in Bond-street, W. Mr. Edward A. Stone, F.S.I., architect and surveyor, 20, Berkeley-street, Piccadilly, W.1 :—

Higgs & Hill, Ltd.	£88,880
F. H. F. Higgs, Ltd.	86,558
F. G. Minter, Ltd.	86,500
Trollope & Colls, Ltd.	83,600
Foster & Dickson	82,925
Walter Lawrence & Son, Ltd.	82,448
C. F. Kearley, Ltd.	81,594
W. Griggs & Son	80,973

London.—Dressing accommodation at the playing-fields at Becontree, for the L.C.C.:—
*C. J. Wills & Sons, Ltd.

London.—Extension to offices, High Holborn, W.C., for Messrs. W. S. Crawford, Ltd. Mr. Herbert A. Welch, F.R.I.B.A., architect, 9, Newsquare, Lincoln's Inn, W.C.2. Messrs. Selby & Sanders, quantity surveyors, Caxton House, Caxton-street, Westminster, S.W.1:—
Steelwork—*H. Young & Co., Ltd., Westminster, S.W.1.
Asphalt—*Salter Edwards & Co., Ltd., Earl's-court, W.
Floors—*Concrete, Ltd., Fenchurch-street, E.C.

London.—Shops, showrooms and flats in King's-road, Chelsea, S.W.3, for the Midland Shop Properties, Ltd. Messrs. Hillier, Parker, May & Rowden (Surveyors' Department), architects, 27, Maddox-street, W.1. Mr. H. W. Langdon, quantity surveyor, 292, High Holborn, W.C.1:—

D. G. Somerville & Co., Ltd.	£35,984
Foundation Co., Ltd.	35,600
Griggs and Son	35,032
Leslie & Co., Ltd.	34,975
James Smith (South Norwood) & Sons, Ltd.	33,350
Killby & Gayford	32,879
C. P. Roberts & Co., Ltd.	32,300
L. & W. Whitehead, Ltd.	32,037
G. Godson & Sons, Ltd.	31,990
John Marsland & Son, Ltd.	31,535
Bovis (1928), Ltd.	31,347
Hammond & Barr, Ltd.	30,567

London.—New offices, etc., at Nos. 104-122, Buckingham Palace-road, Westminster, S.W.1. Messrs. Robert Angell & Curtis, architects, 133, Regent-street, W.1. Messrs. C. E. Ball & Partners, 7, King's Bench-walk, Temple, E.C.4, quantity surveyors:—

	Main Building.	Offices.
Bovis (1928), Ltd.	£78,167	£5,477
Higgs & Hill, Ltd.	77,777	5,353
E. A. Roome & Co., Ltd.	77,543	5,944
C. F. Kearley, Ltd.	77,303	5,311
G. E. Wallis & Son, Ltd.	77,126	5,224
G. Godson & Sons, Ltd.	76,980	5,490
L. H. & R. Roberts, Ltd.	76,875	5,410
Patman & Fotheringham, Ltd.	76,767	5,570
W. F. Blay, Ltd.	76,567	5,327
F. & H. F. Higgs, Ltd.	76,467	5,225
Thomas & Edge	75,985	4,987
*J. Smith & Sons (Norwood), Ltd., Norwood Junction, S.E.25	74,711	4,800

Long Eaton.—19 houses, for the U.D.C. Mr. H. Raven, Housing Architect:—

	Per house.
*E. Orton & Dalby, Hugglescote, near Leicester	£339 12 6

Manchester.—Alterations to Seymour-road Municipal school, Clayton, for the E.C.:—
†E. Marshall & Sons, Ltd., Ashton-under-Lyne.

Meltham.—Interior and exterior decoration of the hospital buildings, for the Colne and Holme Joint Isolation Hospital:—
*J. Wilkinson & Sons, Meltham.

Mexborough.—Reconstruction of premises into an up-to-date bakery, for the Yorkshire Co-operative Bakeries. Mr. C. F. Moxon, architect, 12, Regent-street South, Barnsley:—
*Thompson & Dixon, Ltd., Doncaster.

Morecambe.—Reconstruction of premises, for the Midland Bank, Ltd.:—
*Wm. Nicholson & Son (Leeds), Ltd.

Nelson.—Shop on the Scotland-road site, for Messrs. Montague Burton, Ltd., of Leeds. Mr. Harry Wilson, architect, 81, North-lane, Roundhay, Leeds:—
*G. Cunliffe & Sons, Ltd., Accrington
Steelwork—*Redpath, Brown & Co., Ltd., Manchester.

Newcastle-on-Tyne.—Alterations to premises in Nelson-street. Messrs. Marshall & Tweedy, FF.R.I.B.A., architects, 54, Grey-street:—
*Rutherford & Sons, Newcastle-on-Tyne.

Newcastle-on-Tyne.—Elementary school to accommodate 400 children at Heaton, for Rev. J. McCormack. Messrs. Stienlet & Maxwell, L. & F.R.I.B.A., architects, 5, Saville-chambers, Saville-row:—
*J. & W. Simpson, Blyth.

Newport (Mon.).—Additions and alterations and repairs to the Market-buildings in Dock-street, for the T.C. Borough Architect:—
*G. F. Leadbeter, 10, Conway-road, Newport, Mon £6,937

Newport (Mon.).—172 houses on the Maesglas housing estate, for the C.B. Borough Architect:—
*S. T. Rees & Co., Alexandra-buildings, Aberavon, Port Talbot
*J. Vaughan John, 14, Park View, Port Talbot } £52,251 10
(Combined tender.)

North Berwick.—Cubicles and lavatories at the swimming pond, for the T.C. Messrs. Henry & MacLennan, FF.R.I.B.A., architects, 7, South Charlotte-street, Edinburgh:—
*Alexander Morison, 26 and 28, North High-street, Musselburgh.

Northchurch.—For (1) works of external repairs only, and (2) works of external and internal repairs, to be carried out at parish property, 77-82, Gossoms End, Berkhamsted, for the P.C. Mr. W. H. Storey, "Lentney," King's-road, Berkhamsted:—

J. Stratford & Son, Watford	£224 0 0
S. Gilbert & Sons	204 0 0
W. Phillips	200 17 6
Bunn & Green	195 4 0
G. Ellis	185 19 6
*R. Gilbert	155 0 0
(All of Berkhamsted.)	

Nottingham.—46 houses on Windmill-lane estate, for T.C. Mr. T. Cecil Howitt, architect, 58-59, Long-row:—
*Thos. Bow, Nottingham.
(Subject to M.H. approval.)

Nottingham.—Office and banking premises at the corner of Mansfield-road and Hucknall-road, for the Westminster Bank, Ltd. Messrs. Heazell, Sons & Knight, F. & A.R.I.B.A., architects, Burton-buildings, Parliament-street:—
*Rayner Hustwayte, Nottingham.

Nuneaton.—158 houses on the Attleborough No. 2 housing estate, for the T.C. Mr. H. N. Jepson, architect, Queen's-buildings:—
†H. Boot & Sons, Ltd., Moor-street, Sheffield £52,037
(Subject to M.H. approval.)

Oakhampton.—4 non-parlour type houses at Sourton, for the U.D.C. Mr. J. W. Brimblecombe, Building Surveyor, Brandize-park:—

	Type A.	Type B.
Huggins Bros., Lydford	£1,844	£1,514
Oakhampton Building Co., Oakhampton	1,710	1,440
Bennett & Sons, North Tawton	1,788	1,560
W. Ash & Sons, Sampton Courteney	1,848	1,737

Otley.—Extensions of the sewage disposal works, for the U.D.C. Mr. C. F. Hodgson, surveyor:—
*F. W. Barker, Otley £11,000

Peterborough.—New town hall, shops and offices, for the Peterborough Corporation. Mr. E. Berry Webber, A.R.I.B.A., architect:—

	Portland stone.
W. Jellings, Peterborough	£220,750
John Mowlem & Co., Ltd., London	216,556
C. Miskin & Sons, Ltd., St. Albans	209,820
Bovis (1928), Ltd., London	208,546
Foster & Dicksee, Ltd., Rugby	208,008
Geo. Walker & Slater, Ltd., Derby	207,560
Perrys (Ealing), Ltd., London	206,148
Henry Willcock & Co., Ltd., Wolverhampton	203,674
Battie & Kett, Ltd., Cambridge	203,333
Henry Boot & Sons, Ltd., London	203,029
Walter Lawrence & Co., London	202,920
J. Parnell & Son, Rugby	201,536
W. J. Sims, Son & Cooke, Ltd., Nottingham	199,700
J. Guttridge & Sons, Peterborough	198,456
F. R. Hipperson, London	197,000
Bosworth & Lowe, Nottingham	196,928
William Moss & Sons, Ltd., Loughborough	196,198
Leslie & Co., London	195,619
John Cracknell, Ltd., Peterborough	195,619
Clipsham stone £192,577	
Weldon stone 185,793	
J. Chapman & Sons, Ltd., Leicester	191,959
Clipsham stone 191,959	
Weldon stone 183,990	
*John Thompson & Sons, Ltd., Peterborough	189,639
Clipsham stone 187,122	
Weldon stone 183,347	

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Peterborough.—Four lock-up shops and three shops with living accommodation, on St. John's-street and Eastgate site, for the T.C. Mr. W. H. A. Court, City Engineer and Surveyor:—

H. & L. Cave, Thorney	£5,250
Fairchild & Maddocks, Peterborough	4,562
T. Ellington, Peterborough	4,333
J. Guttridge & Sons, Peterborough	4,290
*J. W. Barber, Peterborough	3,465

Peterborough.—39 houses on Fengate-road and Eastgate site, for the T.C. Mr. W. H. A. Court, City Engineer and Surveyor:—

J. Guttridge & Sons, Peterborough	£16,341 0
T. Ellington, Peterborough	15,352 10
Fairchild & Maddocks, Peterborough	15,220 0
G. Hotter & Sons, Billingborough	13,451 11
*J. W. Barber, Peterborough	12,595 0

Pinner.—8 houses on plots Nos. 25-31 and 72, West End Farm estate, for the Home Guarantee Corporation, Ltd. Mr. Brian L. Sutcliffe, A.R.I.B.A., architect, 7, Duke-street, Wigmore-street, London, W.1:—
*A. V. Low £9,489

Preston.—Alterations and improvements to the "Grey Horse" hotel, Church-street, for Messrs. Oddison, Ltd. Mr. B. Drummond, A.R.I.B.A., architect, 54, Adelaide-street, Fleetwood:—
*J. Allen, Preston.

Richmond, Surrey.—Additional dressing accommodation at public baths, for the County Borough. Borough Engineer and Surveyor, Town Hall:—

Cowper & Son, Richmond	£988 0 0
West Woodworkers, Ltd., Islington	980 0 0
Mond Staffordshire Refining Co., Ltd., S.W.9	968 17 2
H. Bragg & Sons, E.C.2	967 8 9
Negus, Ltd., E.C.4	939 0 0
G. Challis & Co., Brentford	923 0 0
T. & R. Muirhead, Ltd., Westminster	919 16 10
A. J. Thair, Isleworth	898 0 0
Soole & Son, Ltd., Richmond	889 0 0
Thorogood Bros. & Son, Surbiton	884 15 0
Hidden & Co., Brentford	880 14 0
Thos. Hiscock, Ltd., Hounslow	872 0 0
Hickman (1928), Ltd., Clapham	867 0 0
A. Pascall & Son, Hammersmith	860 0 0
Folshom, Ltd., Richmond	859 0 0
W. H. Pecover, East Sheen	851 8 11
Cooper & Son, Hammersmith	848 0 0
Speechley & Smith, Richmond	828 0 0
Hammond & Barr, Chelsea	819 0 0
E. Potterton, East Molesey	816 0 0
*D. Pierson & Co., Wandsworth	816 0 0

Richmond, Surrey.—Convenience at Kew Bridge, for the Borough Council. Borough Engineer and Surveyor, Town Hall:—

West Woodworkers, Ltd., Islington	£3,412 0 0
A. Roberts & Co., Kensington	3,196 0 0
Limpus & Son, Kingston	3,146 0 0
Jno. Crewdson, Horley	2,970 0 0
A. Logan, Battersea	2,955 0 0
C. H. Gibson, Ltd., Croydon	2,951 0 0
F. G. Cressy, Ltd., Chiswick	2,889 0 0
W. H. Wagstaff & Sons, Holborn	2,725 0 0
Speechley & Smith, Richmond	2,650 0 0
Soole & Son, Ltd., Richmond	2,606 0 0
*T. & R. Muirhead, Ltd., Westminster	2,498 10 9

Scarborough.—Structural alterations to the Cafe Depot on Dean-road, for the Corporation. Mr. H. W. Smith, Borough Engineer:—
*T. Wilcox, Scarborough £1,300

Shrewsbury.—Senior (elementary) Boys' and Girls' schools, for the Shrewsbury B.C. Mr. Bernard Widdows, architect, St. James Chambers, Derby:—
*Walter Danks, Eccleshall, Staffs ... £27,500

Spenborough.—136 houses on various sites, for the U.D.C. Mr. A. Rothera, surveyor:—

Masons—	
*J. B. Allatt & Sons, Heckmondwike (18)	£3,237 0
*G. W. Avehard, Batley (30)	4,748 0
*A. Drake & Sons, Cleckheaton (20)	3,247 0
*A. L. Greenwood, Cleckheaton (18)	2,970 0
*T. Drake, Liversedge (22)	3,761 0
*J. Horkin & Son, Liversedge (22)	4,671 0
Joiners—	
*J. Brooke & Sons, Ltd., Dewsbury (50)	4,632 0
*A. Charlesworth, Liversedge (10)	945 0
*R. J. Patchett, Ltd., Queensbury (76)	7,184 0
Slaters—	
*Hill & Wilson, Bradford (30)	957 0
*A. Thompson & Sons, Ltd., Liversedge (106)	3,392 0
Plumbers—	
*M. Graves, Gomersal (20)	939 0
*A. Jackson & Son, Liversedge 14)	651 0
*W. Waterhouse, Liversedge (62)	3,199 0
*C. Wood, Liversedge (10)	495 0
*G. Sykes, Gomersal (30)	1,392 0
Plasterers—	
*Idle & Son, Gomersal (46)	1,382 0
*Iredale & Sons, Ltd., Gomersal (40)	1,253 0
*F. Robinson, Gomersal (10)	291 0
*Sellers Bros., Cleckheaton (40)	1,146 9
Electricians—	
*Butler & Horn, Cleckheaton (40)	303 0
*Hepworth & England, Batley (96)	706 16
Painters—	
*F. Akers & Sons, Cleckheaton (50)	412 10
*— Crowther, Cleckheaton (56)	445 5
*S. Sutton, Gomersal (30)	231 0

Smallburgh.—Erection of cottages; 3 pairs at Ludham and 6 pairs at Sutton, for the R.D.C.:—

	Per pair.	Per 3 pairs.
Ludham—		
Dale, Riches & Clarke, Ludham	—	£1,995
S. Smith, Wroxham	£662	1,986
*R. H. Stringer & Son, Wroxham	656	1,960
Tooley & Youngs, Stalham	656	—
		Per 6 pairs.
Sutton—		
Jas. Baker, Catfield	£660	—
B. Lambert, Hickling	637	—
S. Smith, Wroxham	662	£3,972

Southport.—Bank premises at London-street and Lord-street, for Messrs. Lloyds Bank, Ltd. Messrs. George Tonge & Felix Holt, architects, Hill-street:—

*Griffiths, Sons & Cromwell, Ltd., Liverpool

Stocksbridge.—Alterations and extensions to existing school buildings to form new shops for the Stocksbridge Co-operative Society, Ltd. Mr. Chas. E. Moxon, architect and surveyor, Regent-street South, Barnsley:—

*D. Brearley & Son, Deepcar £6,000

Thornbury.—(*a*) 8 houses at Ridgeway, and (*b*) 8 at Pilning, for the R.D.C.:—

*P. G. Hawkins, Thornbury £2,526
*P. H. Moss, Northwich 2,444

Wakefield.—Ten houses on the Lupset estate, for the Corporation. Mr. Percy Morris, Housing and Town Planning Department:—

Bricklayers—*W. H. Nicholson & Sons.
Joiners—*Broadhurst & Turvey.
Plumber—*H. Gillott.
Plasterers—*Newton & Barnes.
Slaters—*J. W. Illingworth, Ltd.
Painter—*J. H. Audsley.
(All of Wakefield.)

Wakefield.—Two combined houses and shops on the Batley-road estate. Mr. P. Morris, architect, Town Hall:—

*Nicholson & Sons.
Plumber—*H. Gillott.
Joiners—*Broadhurst & Turvey.
Plastering—*Nicholson & Platts.
Slating—*Illingworth, Ltd.
Painting—*Taylor & Son.
(All of Wakefield.)

Warrington.—Tramways shelter and conveniences at the cemetery, for the C.B. Mr. A. M. Ker, Borough Engineer and Surveyor:—

*J. Broadhurst, Arpley-road, Warrington.

Williton.—2 houses at Stringston and 2 at Holford, for the R.D.C.:—

*Chidgey & Morse, Watchet £1,320

Woodstock.—18 houses in Kidlington, for the R.D.C. Mr. C. W. Page, surveyor, Horse Fair, Woodstock, Oxford:—

A. Cox & Son, Ltd., Abingdon	£7,424	0
E. W. Baker & Son, Deddington	7,039	0
H. A. Tolley, Bladon	7,000	0
A. W. Waters, Cassington	6,976	0
Wastie Bros., Long Handborough	6,904	0
Bartlett Bros., Witney	6,894	0
W. & A. Collisson, Banbury	6,599	12
*Charles Oakley, Abingdon	6,401	0

(Subject to approval of M.H.)

Worcester.—New County Offices, for the Worcester C.C. Mr. A. V. Rowe, F.R.I.B.A., architect, 38, Foregate:—

Floors—*Victoria Simplex Floors, Ltd., Westminster.
Stonework—*Bath and Portland Stone Firms, Ltd., Bath.
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